

Chilton's MOTOR AGE

APRIL 1956



*We are seeking the
confidence of the public.*

*The public is seeking honest
quality and courteous, helpful
service.*

*Our greatest opportunity
lies in our ability to prove
by our deeds that we are
worthy of confidence and
patronage.*

*T.J. Thomas
Prop.*

BRADLEY

Jobber Executive Edition—follows page 32

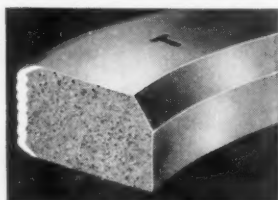
TO THE OWNER
OF THE BUSINESS—
WHO WANTS
ENTHUSIASTIC
CUSTOMERS



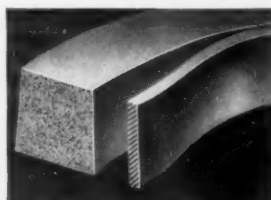
Sealed Power KromeX RING SETS

deliver more than you promise!

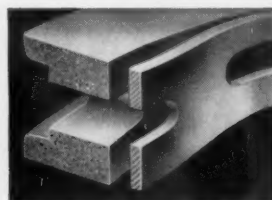
- Fast break-in
- Smooth performance
- Fast pick-up
- Immediate oil control
- Positive lubrication
- Double ring life



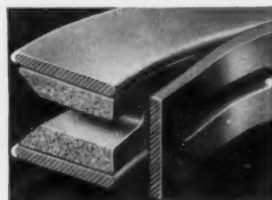
CHROME TOP RING



2ND RING

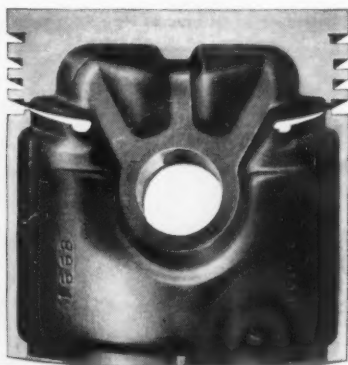


OIL RING



CHROME OIL RING

All major car manufacturers use Sealed Power Rings for original equipment



Sealed Power Pistons

Sealed Power's complete line of pistons covers every replacement need. Exclusive 3-rib design means extra strength where needed most. Ring grooves are true and accurate.

PX PISTONS FOR REBORE JOBS

Sealed Power PX Pistons offer the utmost in quality for heavy duty service. Factory-fitted with GI-60 insert for permanent top groove protection. Special oil absorbent finish prevents scuffing during break-in.



SEALED POWER CORPORATION, MUSKEGON, MICHIGAN

Sealed Power Piston Rings

BEST FOR RE-RING!

BEST FOR RE-BORE!

Ask for Sealed Power Sleeves, Piston Pins, Valves and Water Pumps

NOW... GET PERMATEx BRAKE FLUID IN THIS NEW 2½-GAL. REUSABLE CAN

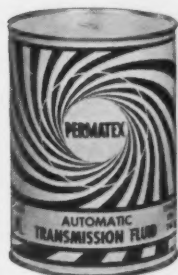


Paper label easy to remove—you can make a profit selling the can when it's empty.

Here's a "premium" you'll find a hundred ways to use. This new spout-type can will last for years. You can even resell it. And it's yours with Permatex Heavy-Duty and Moderate Duty Brake Fluid.

Permatex Heavy-Duty Brake Fluid Meets or Exceeds SAE Specifications. Order Permatex from Your Supplier and Get This 2½-Gal. Can Now!

Permatex Heavy-Duty Brake Fluid also available in 12-oz., 1-qt., 1-gal. cans, 2½-gal. reusable spout drum, 5-gal. reusable spout drum, and 53-gal. drum.



For All Automatic Transmissions and Power Steering Units— NEW PERMATEx AUTOMATIC TRANSMISSION FLUID

Mixes with all automatic transmission fluids—lubricates moving parts—prevents gum, sludge and corrosion. Correct viscosity assured. Temperature range from

–40° to 300°F. Get this profitable business with Permatex uniform high quality. Order from your jobber—sizes one-quart to 53-gallon drums.

PERMATEx COMPANY, INC. • Brooklyn 35, N.Y. • Kansas City 15, Kans.

More Than 50 Chemical Products for Better Automotive Maintenance



SECRET SERVICE TIPS by SHERLOCK McKANICK

Clues for a 12 volt detective!

"Electrolyte leakage will discharge a 12 volt battery 4 times as fast as a 6 volt battery," warns Sherlock McKanick, famed Blue Streak trouble-shooter.

"Blue Streak Bulletin No. 83-55 has valuable tips on how to prevent this damaging current discharge. For example: Clean battery with dilute ammonia or soda solution. Clean corrosion around posts and terminals. Use wire brush cleaner (Blue Streak Part No. 71).

"Special Clue: To insure against

current leakage to ground, install an insulated Blue Streak Resistor Battery Hold-down. Insulated with non-corrosive neoprene, Resistor cuts current path."

Become a registered Blue Streak dealer and get periodic bulletins and an entire backlog of secret service tips. 40,000 Blue Streak mechanics use this "crime-file" to trace trouble quickly to the scene.

Write for Bulletin 83-55 today!
STANDARD MOTOR PRODUCTS, INC.
37-16 Northern Blvd., L.I.C. 1, N.Y.



Blue Streak

IGNITION PARTS
precision engineered for replacement



Chilton's MOTOR AGE, April, 1956

Chilton's MOTOR AGE

WITH WHICH IS COMBINED AUTOMOBILE TRADE JOURNAL

Reg. U. S. Pat. Off.

For THE AUTOMOTIVE SERVICE INDUSTRY

75, No. 5

April, 1956

Frank P. Tighe
Editor

J. K. Montgomery
Technical Editor

William H. Wolfe
Managing Editor

R. C. Rittenhouse
Associate Editor

Marcus Ainsworth
Statistical Editor

Howard Kohlbrenner
Art Director

Leonard Westrate
Detroit News Editor

Edward Janicki
Detroit Assoc. Editor

Joseph Geschelin
Engineering Editor

G. H. Baker
Washington Editor

R. M. Stroupe
Neil R. Regeimbal
Washington News Editors

R. Raymond Kay
Pacific Coast Editor

Paul Wooton
Washington Member of
the Editorial Board

Member



In This Issue...

Newscoop	33
Report to Our Readers	37
Down The Lane to Safety	42
Replacement Parts—Your Automotive Spring Tonic	44
Paint-Up, Fix-Up Jobs Mean Extra Cash	46
Body Shop Tips	48
Readers' Clearing House	49
Inside Delco's New Distributor	50
Merchandising Forum Section	53
Work-A-Day Specs	57
1956 Passenger Car Body Data	58
1956 Passenger Car Body Dimensions	59
General Engine Data, Pistons	60
Piston Rings, Piston Pins, and Connecting Rods	61
Crankshafts, Camshafts	62
Valves, Intake and Exhaust	63
Valve Timing, Lubrication, and Exhaust Systems	64
Fuel and Cooling Systems	65
Drive Belts, and Electrical Supply System	66
Starting and Ignition Systems	67
Ignition Timing, Spark Plugs, and Clutches	68
Lamp Bulbs, Fuses and Circuit Breakers	69
Transmissions—Conventional and Conventional with Overdrive	70
Automatic Transmissions	71
Propeller Shaft, and Rear Axle	72
Tires and Brakes	73
Front Suspension and Steering	74
Wheel Alignment, and Rear Suspension	75
Foreign Cars	76
Wheel Type Tractors	80
Tune-Up Data on 1951-1956 Cars	84
Small Gasoline Engines	87
New Products	89
Shop Kinks	94
Advertisers' Index	204

Copyright 1956 by Chilton Company (Inc.)

RUSSELL W. CASE, JR., Publisher
CHARLES W. HEVNER, Asst. to Publisher
E. H. MILLER, Adv. Mgr. E. W. HEVNER, Cir. Mgr.

JOSEPH P. JENNINGS, Research

REGIONAL MANAGERS

CURTIS F. MOSS, Chicago WILSON HOWE, New York
H. M. WERTZ, Chicago R. J. BIRCH, San Francisco
BEN E. BALL, Cleveland F. W. McKENZIE, San Francisco
J. A. LAANSMAN, Detroit L. H. JACKSON, Los Angeles
GORDON BRAUNINGER, Dallas

Offices: Philadelphia 39, Pa.—Chestnut & 56th Sts., Phone: Silverwood 8-2000.
New York 17, N. Y.—100 E. 42nd St., Phone OXford 7-3100. Chicago
1, Ill.—Room 916, London Guarantee & Accident Bldg., Phone Franklin
2-4243. Detroit 2, Mich.—1015 Stephenson Bldg., Phone Trinity 5-2090.
Cleveland 14, Ohio—730 National City Bank Bldg., Phone CHerry 1-4188.
Washington 4, D. C.—1093 National Press Bldg., Phone Executive 3-3474.
San Francisco 4, Cal.—300 Montgomery St., Phone DOuglass 2-4200.
Los Angeles 5, Cal.—3156 Wilshire Blvd., Phone DUNkirk 7-2119. Dallas 18,
Texas—8537 Eustis, Phone DAVIS 7-4176. Member of Audit Bureau of
Circulation.

MOTOR AGE. Published monthly by Chilton Co., Chestnut & 56th Sts., Phila. 39, Pa. Entered as Second Class Matter December 27, 1935, at the Post Office at Philadelphia, Pa.; Under the Act of Congress of March 3, 1879. Subscription price: United States, United States Possessions, \$4.00 for one year; \$7.00 for two years. Canadian, Foreign \$5.00 per year; single copies, 40 cents.

One of the Publications Owned by

CHILTON COMPANY (INC.)

Executive Offices

Chestnut & 56th Streets, Philadelphia 39, Pa., U. S. A.

Officers and Directors

JOSEPH S. HILDRETH, Chairman of the Board

G. C. BUZBY, President

Vice-Presidents

P. M. FAHRENDORF HARRY V. DUFFY

WILLIAM H. VALLAR, Treasurer

JOHN BLAIR MOFFETT, Secretary

GEORGE T. HOOK

ROBERT E. McKENNA

MAURICE E. COX

IRVING E. HAND

FRANK P. TIGHE

EVERIT B. TERHUNE, JR.

L. V. ROWLANDS

RUSSELL W. CASE, JR.

JOHN C. HILDRETH, JR.



A Performance Sensation... A Fashion First!

⦿ This year there's an all-new way to measure automobile performance—measure it against Pontiac!

For Pontiac performance outstrips in a breeze any other on the road. And it didn't just happen! Pontiac engineers started from scratch with a brand-new Strato-Streak V-8 engine.

Then they added the all-new Strato-Flight Hydra-Matic* especially engineered to work as a team with Strato-Streak power!

And what a team it is!

There's the blazing "go" of 227 horsepower born in the most modern, high-compression, high-torque engine you can buy!

There's the incredible smoothness of

Strato-Flight Hydra-Matic's liquid-link coupling and the lightning-fast, positive action of its gears.

No wonder they're calling Pontiac America's No. 1 spine-tingler!

Just as forward looking as the engineers, Pontiac designers jumped a few years to set an equally new trend in styling. No car at any price is more distinctive in its exterior beauty . . . more luxuriously colorful in its interiors . . . more obviously branded with the exciting stamp of the future.

Surprisingly, all this performance and style is priced well within the reach of any new-car buyer. Easy to see why people are calling Pontiac "the beautiful buy with the blazing GO!"

*An extra-cost option.



PARIS FASHION SHOW—PONTIAC STYLE

This year Pontiac interiors are more colorful and luxurious than ever! Wherever you look in the new '56 models, you'll see the magic touch of one of the industry's top styling teams. Selecting from glamorous leathers, fabrics and trim accessories, they have created the most breath-taking interior effects in Pontiac history!

PONTIAC MOTOR DIVISION OF GENERAL MOTORS CORPORATION

'56 PONTIAC

THE GREATEST GLAMOUR AND GO ON WHEELS!

"...have stepped up sales tremendously"

says Chrysler-Plymouth dealer **E. M. LONG**,
partner in Pines Motor Company of Pine Bluff, Ark.

"I have been familiar with COMMERCIAL CREDIT for the past 25 years and our customers seem to appreciate the protection and benefits of their 7-Point Plan. By working this plan into their original selling story, our men have stepped up sales tremendously. We're doing a much better job of penetrating our market. The local COMMERCIAL CREDIT people work well with us. Altogether, we have found their service most satisfactory."

Commercial Credit dealers are successful dealers

Write or call our nearest COMMERCIAL CREDIT office for complete information on the benefits of COMMERCIAL CREDIT PLAN. Why not do it today?



COMMERCIAL CREDIT CORPORATION

A service offered through subsidiaries of Commercial Credit Company, Baltimore . . . Capital and Surplus over \$190,000,000 . . . offices in principal cities of the United States and Canada.





Where performance counts most
GIVE THEM Fm QUALITY!

Whether your customer is plowing fields, matching wits with traffic lights or working a truck for profit, he's interested in *top* performance! Longer engine bearing life means dollars saved. Give your customers Fm quality in replacement engine bearings. Federal-Mogul engine bearings have led the field in quality and sales for more than 30 years!

FEDERAL-MOGUL SERVICE

Division of Federal-Mogul-Bower Bearings, Inc.

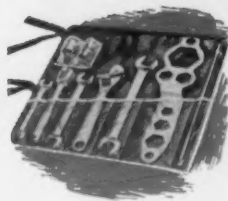


RESEARCH • DESIGN • METALLURGY • PRECISION MANUFACTURING • SERVICE

STUCK



BY GUM!



TOOL KIT

Service even the hard-to-get-at filters on today's cars. This Filter Service TOOL KIT is available to you at a fraction of its cost.

FREE MANUAL

Contains illustrated instructions for servicing filters on all cars. Ask your Jobber's salesman for your FREE copy.



Your customers feel it quick—in their pocketbooks—when their cars are pinned down on the road or in the shop by sticky valves, scored cylinders and worn bearings. The common cause of these troubles is dirty motor oil full of grit, dirt and gummy sludge. The thrifty cure . . . prevention . . . and your assurance of continued customer satisfaction, is WIX Engineered Filtration.

WIX provides a *complete* Line of top-quality, HEVI-DUTY Oil Filter Cartridges for every car that drives into your Shop . . . prescription-type Filtrants including Premium WIX-KNIT and Pleated POROSITE for full-flow systems, Resilient Density WIXITE for by-pass systems . . . PLUS a complete Sales and Merchandising Program backed by consistent, National Consumer Advertising to boost your Cartridge sales.



NATIONAL ADVERTISING

Leading national consumer publications, including LIFE and SATURDAY EVENING POST, tell your customers how they save money with WIX—give you powerful sales support.

Take advantage of this money-making opportunity—write for details today!

wix®

OIL FILTERS CARTRIDGES

WIX CORPORATION • GASTONIA • N. C.

In Canada: Wix Accessories Corp. Ltd., Toronto

DELCO-REMY PRESENTS THE NEW KLAXON "K-3" HARMONIZING AUTO HORN

**This third horn blends with standard twin horns
to create a distinctive new musical sound!
Here's how it can mean more sales for you:**

To boost your accessory volume in 1956, Delco-Remy brings you the new Klaxon "K-3" Harmonizing Auto Horn. This third horn, by blending its note with the two notes of present twin horns, gives a car a distinctive, musical new voice.

The new Klaxon "K-3" can be installed quickly in millions of cars now in use. At low cost, too. National advertising in The Saturday Evening Post will help you sell, so be prepared to get your share of this profitable business. See or call your nearest General Motors dealer or United Motors distributor today, for complete details.

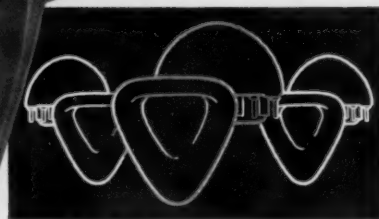
DELCO-REMY • DIVISION OF GENERAL MOTORS • ANDERSON, INDIANA



GENERAL MOTORS LEADS THE WAY—STARTING WITH

Delco-Remy

ELECTRICAL SYSTEMS



▲
By blending its note with the two notes of present twin horns, the new Klaxon "K-3" Harmonizing Auto Horn makes today's cars sound as good as they look!

Phony Fables about Oil Seals



Fable No. 1

"Always send out when you need new seals"

OK, if you want to. But it's a lot more profitable to reach into your own oil seal cabinet, get the right seal, and finish up the job first class and fast.

Everyone recommends new seals whenever old ones are removed. Make this an easy, automatic procedure in your shop. Ask your jobber to install a National Oil Seal service stock. He'll keep it current, weed out old numbers—no work for you. You get complete application data, quantity prices, and an all-steel cabinet with extra room for bearings.

Make a note now: "ask jobber about National Oil Seal service stock."



Support this
industry-wide
program

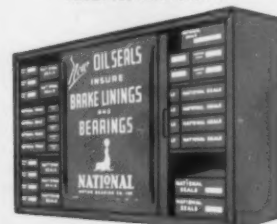


NATIONAL MOTOR BEARING CO., INC.

GENERAL OFFICES: Redwood City, California
PLANTS: Redwood City, California and Van Wert, Ohio



Small National seal stock.
Over 50 front wheel seals.
Ideal for lube stations.



Large National seal stock.
Over 100 front and rear wheel
seals for garages, brake shops.

NATIONAL
OIL & GREASE SEALS
O-RINGS SHIMS

Approved original equipment for all cars, trucks,
buses and tractors.

Another First from

Raybestos®

AUTOMATIC TRANSMISSION MASTER OVERHAUL KITS



A KIT FOR EVERY MAKE AND MODEL — THIS ONE IS FOR HYDRA-MATICS!

Here they all are in one master overhaul kit! — all the parts engineers say you should replace whenever you repair an automatic transmission. These are the moving parts that wear out and the gaskets and seals that should

be renewed to avoid costly comebacks. Automatic transmission overhauls are profitable. With these new Raybestos kits you can be sure of your work. Ask your Raybestos jobber for full details or send in the coupon.



MASTER OVERHAUL KITS INCLUDE ALL necessary friction discs, spacer plates, gaskets, front and rear clutch piston seals and expanders, "O" rings, reverse clutch piston seals, front oil pump seal, and rear bearing oil seal.

RAYBESTOS DIVISION

Raybestos-Manhattan, Inc., Bridgeport 2, Conn.

Please rush me more information on the Raybestos Automatic Transmission Master Overhaul Kits.

Name

Title

Company

Street City State

Raybestos

MAKERS OF AMERICA'S BIGGEST SELLING BRAKE LINING

RAYBESTOS DIVISION OF Raybestos-Manhattan, Inc., BRIDGEPORT, CONN.



RAYBESTOS-MANHATTAN, INC., Brake Linings • Brake Blocks • Clutch Facings • Fan Belts • Radiator Hose • Industrial Rubber, Engineered Plastic, and Sintered Metal Products • Rubber Covered Equipment • Asbestos Textiles • Laundry Pads and Covers • Packings • Abrasive and Diamond Wheels • Bowling Balls



SELLING SLANTS

FROM DU PONT • MAKERS OF "ZERONE" AND "ZEREX" ANTI-FREEZE

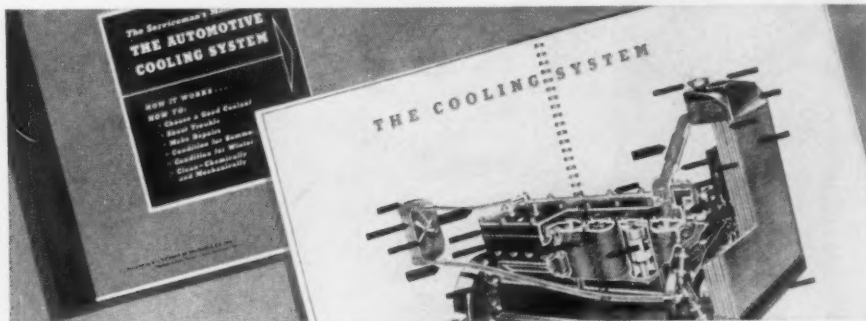


JUST A HINT THAT SUMMER'S COMING . . . time to make sure all your customers' cars have had winter-worn anti-freeze drained out and are completely serviced for warm-weather driving ahead.

Du Pont Manual Explains Cooling System Care—Helps You Make More Money!

Here in one 44-page book is everything you need to know about the automotive cooling system, how it works, how to trouble-shoot, how to make repairs and how to charge for the work you do! This big (11" x 14") hard-covered manual is designed for fast, easy reference. Large pictures and diagrams in full color show you each step of every cooling system job.

Put this book to work in your station and you'll see the profits go up. Produced to sell for \$3.00, this manual is offered to "Selling Slants" readers for \$1.95! Send your check or money order for your copy of "The Serviceman's Manual on the Automotive Cooling System" to Du Pont at the address shown at the bottom of this page.



WRITE TO:

"SELLING SLANTS"

E. I. DU PONT DE NEMOURS & CO.

"Zerone"- "Zerex" Section

Nemours 2420-B2, Wilmington 98, Del.



ZERONE[®] and ZEREX[®] ANTI-FREEZE

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

How to Increase Your Business and Profits

Spring is the ideal time to build your business because it offers you so many easy ways to be of service to motorists in your neighborhood: For example:

If you look closely, you'll find that most cars show the signs of a hard winter. This gives you your chance to build business and profits. Here's how:

1. Take time to check and replace, where needed, tires, batteries, wiper blades, spark plugs, oil filters, etc., on every car you can.
2. Drain out winter-worn anti-freeze and clean radiator if needed. Check hose connections, fan belts and other cooling system parts.

urges motorists to drain out winter-worn anti-freeze and motor oil. Space is also provided for a dealer imprint and service message. You can get 50 of these cards (shown below) along with a tie-in window streamer when you reserve your '56 order of "Zerone"



HERE'S ANOTHER SALES IDEA

Don't wait for business to drive in—use direct mail and go after it!

You'll make extra money when you remind every prospect on your list that it's time for a check-up now, before summer driving and vacation trips are here. Many dealers report great success with direct-mail reminders... find they are good-will builders, too.

To help dealers increase their business with direct mail, Du Pont has prepared a colorful card that

and "Zerex" anti-freeze. Ask your supplier for more information or write to Du Pont (address below).

Have You Reserved Your 1956 Supply of "Zerone" and "Zerex" Anti-Freeze?

There's good reason why you should reserve your '56 supply of "Zerone" and "Zerex" anti-freeze right now.

You will be sure of having all you need when you need it and in the container sizes you prefer. Then no matter how early the cold weather hits you'll be all set for those anti-freeze sales and profits. Even more important—you can start winterizing your customer's car *before* the first freeze and get a head start on the profitable anti-freeze business. So reserve your "Zerone" and "Zerex" now—America's largest-selling anti-freeze team—made and backed by Du Pont.



If all cars with Rochester Carburetors were painted orange . . .



the parking lot at the Polo Grounds would look like this!

Rochester's really in there pitching . . . coming through with the right mixture of gas and air for nearly half the new cars on the road. That's because Rochester Carburetors go hand-in-glove with today's modern high-compression, high-performance engines. They put the squeeze play on fuel, too . . . stretch every drop for maximum economy. And these carburetors are rugged and responsive from idle speed to speedway action! They're dependable, durable and specially designed for the world's finest cars. That's why you'll find Rochester Carburetors on the new Cadillac, Buick, Oldsmobile, Pontiac and Chevrolet.

CARBURETORS BY **ROCHESTER**
PRODUCTS

ROCHESTER
PRODUCTS
DIVISION OF
GENERAL MOTORS
CORPORATION
ROCHESTER N.Y.



Are you losing body jobs to competitors?

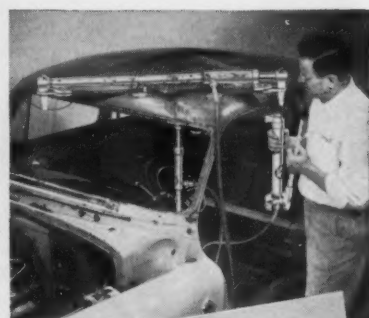
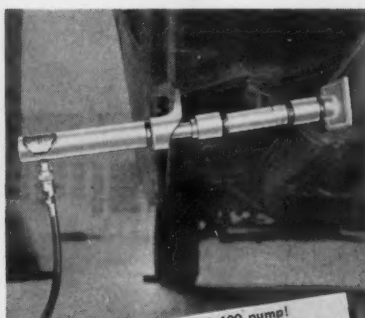
Rate the PROFIT POWER of your PORTO-POWER



Yes sir! Just like a motor is rated for *horsepower*, you can now rate your "Porto-Power" equipment for its "*profit power*". Check the simple inventory at the right and learn if you're missing big income. This inventory is vital to you because it can reveal whether you are in a position to *cut labor costs* — the secret of a profitable body business. Today's competitive standards demand that you bring your shop up-to-date with the very latest Blackhawk "Porto-Power" hydraulic tools — just as you've modernized basic equipment in other departments.



Check... do you have this PROFIT POWER?

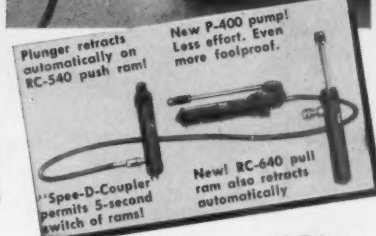


NEW

Multi-Purpose Pull Clamps

Exclusive new techniques snap damaged metal into position without stretching or distortion. For Bantam "Porto-Power" get "Pull Clamps" ass't AZ-12 (\$52.80) — for 10-ton get ass't FZ-13 (\$59.25).

With complete "Porto-Power" Pull-clamp attachments, a panel aligning job (shown) is done faster, easier and better — for lower labor costs and more profits.



NEW

World's Fastest Body Jack!

Bantam "Porto-Power" is more powerful, more foolproof than ever. New rams and couplings permit amazing speed. Get the "Bantam" SA-50 (\$44.00) hydraulic unit — and RC-640 (\$19.50) Pull Ram.

Such up-to-date "Porto-Power" is a must for jobs like that shown above — rocker panel being easily straightened with Bantam spreader combination.



NEW

Make Set-ups in Half The Time!

"Lock-on" double purpose tubing slides together instantly — for 50% faster set-ups. Can also be threaded together. Get the "Bantam" AZ-13 ass't (\$21.50) or FZ-14 (\$36.90) 10-ton "Lock-on" tubing.

In photo above, deep dents are pulled from car top with quick "Porto-Power" set-up with pull clamps and links, offset pull toes, "Lock-on" tubing and pull rams.

BLACKHAWK

BLACKHAWK MFG. CO., Dept. P-646, Milwaukee 46, Wisconsin

World's Largest Manufacturer of HYDRAULIC TOOLS

Prices subject to change without notice

DISCOVER IF YOUR SHOP IS EQUIPPED TO MAKE BIDS THAT GET THE BUSINESS AT A PROFIT!!!

Thousands of body shops have already rated themselves, plugged up the gaps in their "Porto-Power" equipment and are now fully competitive. They have found that it takes up-to-date "Porto-Power" equipment that's complete and in good shape to run a body service that's efficient by today's standards. You can do the same . . . quickly and easily. Just take these three steps to **MORE PROFITS!**

STEP 1

Take a quick inventory of your "Porto-Power" — check the principal hydraulic units, major attachments and auxiliary equipment pictured below. Mark the quantity of each in column one. Next multiply that quantity figure by the "profit rating" of the item and enter in column two.

NUMBER IN SHOP	TOTAL PROFIT POWER RATING
----------------------	------------------------------------

Clip completed form — see your Blackhawk jobber or mail to Blackhawk for ideas to increase your Profit Power

10-TON HYDRAULIC UNIT



S-71 (\$63.75) — The heart of all major body repair work. Absolutely necessary for all reinforced sections. Used with attachments for hundreds of setups. PROFIT POWER RATING 10%

BANTAM HYDRAULIC UNIT



NEW — SA-50 unit (\$44.00) — with fast-action pump, spring-return ram. Has full 4-ton capacity for today's modern cars. Greater power, faster work on all light sheet metal repair. PROFIT POWER RATING 10%

WEDGEIE



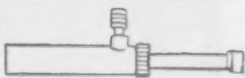
SA-4 or SA-6 (\$21.90) — The fast, profitable answer to troublesome dents and creases in fenders, doors, cowl and body sections. Built-in ram opens jaws $\frac{3}{8}$ " to $\frac{3}{4}$ ". PROFIT POWER RATING 7%

SPREAD RAM



SA-7 (\$36.50) — Heavy-duty, long-reach, wide range spreader really does the job for bringing out dents in deep fenders, panels, etc. PROFIT POWER RATING 4%

BANTAM PULL RAM



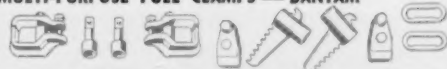
NEW — RC-640 (\$19.50) "Spring-Back" 2-ton pull ram developed to lick tough direct pull operations. Compact, lightweight and fast! Speeds work on panel sections, trunk, door and fender alignment. PROFIT POWER RATING 6%

BANTAM SHORT RAM



RC-618 (\$11.45) — A compact, squat-type ram for most effective push in smallest spots. Gets in, works fast where it's impossible to hammer or pry — for fender work, headlights, tail fins, insides of doors. PROFIT POWER RATING 5%

MULTI-PURPOSE PULL CLAMPS — BANTAM



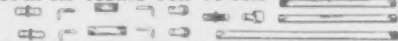
NEW clamp set (\$33.30) gives more ways to pull, more speed and easier setups. Eliminates distortion and warping on light sheet metal sections, increases versatility of present "Porto-Power." PROFIT POWER RATING 7%

MULTI-PURPOSE PULL CLAMPS — 10 TON



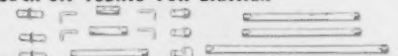
NEW — (\$59.25) For faster work, more compact setups, better workmanship on tough, reinforced metal sections. Pull-Clamp hook-ups pull damaged metal from outside the panel — pull damaged sections into alignment in one operation. PROFIT POWER RATING 7%

LOCK-ON TUBING FOR 10-TON



NEW — FZ-14 (\$36.90) modern Lock-On tubing knocks 50% off time required to make push, pull and spread setups. Can be used with standard tubing. PROFIT POWER RATING 8%

LOCK-ON TUBING FOR BANTAM



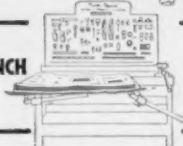
NEW — AZ-13 (\$21.50) Lock-On tubing and attachments slide together quick as a wink, and presto — are locked by a spring-backed button. Makes all Bantam equipment more efficient, steps up shop earnings. PROFIT POWER RATING 8%

ADJUSTABLE BODY SPOONS



Z170 Ass't (\$9.80) For use with either Bantam or 10-ton units. All shapes and sizes to handle many different contours — restore original curvature of body panels. One fork and various spoons give 14-24 different angles for bringing out damage in low and high crown areas. PROFIT POWER RATING 5%

STORAGE PANEL STEEL WORK BENCH AND HOLDING RACK



FZ-27 (\$269.85) Holds all attachments plus 2 rams and spreader. Keeps all equipment in one place. Organizes your shop. Has Door Bar and Adjustable Clamping Arms that rigidly hold any body section. Handle bulky fenders, heavy doors, deck lids, hoods for all repair work, even sanding and finishing. PROFIT POWER RATING 13%

GENERAL ASS'T OF BASIC ATTACHMENTS

Includes such vital items as Shorty and Midget Rams; Connectors; Pull Plates; Clamp, Ram, Spreader and Plunger Toes; Spreaders; Adapters; Saddles; "C" Clamps; Flex-Heads; Clamp and Wedge Heads; Chain and Chain Pull Plates; Wheel Pullers; Ram Base Extensions, etc. Need majority of these in good condition for high rating. PROFIT POWER RATING 10%

only
BLACKHAWK
makes
Porto-Power

STEP 2

"Profit Power" ratings printed above in red add up to 100% which represents what EACH body man should have. So — add up the right hand column and enter total in Box A. Next divide by number of men who use this equipment. Enter answer in Box B — the "Profit Rating" of your "Porto-Power".

 A

STEP 3

Bring yourself up to 100% by ordering the equipment necessary to fill the gaps and bring your methods and profits up to standard. See your Blackhawk jobber promptly.

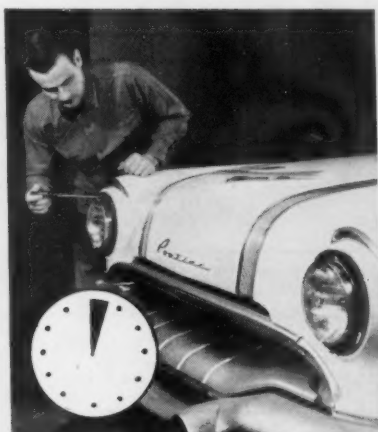
 B

To bring your Porto-Power up to full profit power, be sure to contact the nearby jobber who is **HEAD-QUARTERS** for **BLACKHAWK HYDRAULIC TOOLS**.

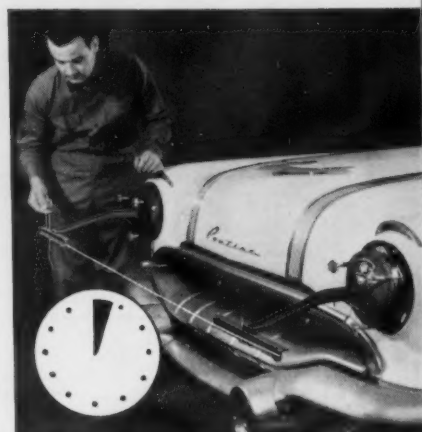
You can install these Guide T-3 sealed beam



IN 1½ MINUTES—old lamps removed from mounting and disconnected.



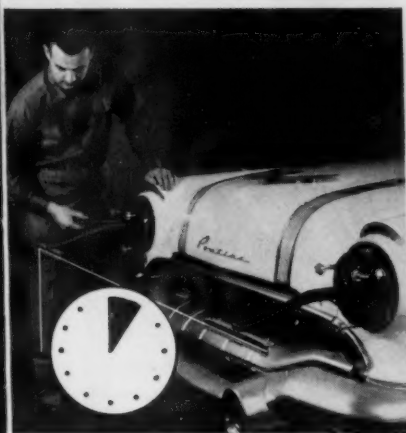
AFTER 3 MINUTES—new T-3 headlamps installed...like ordinary headlamps!



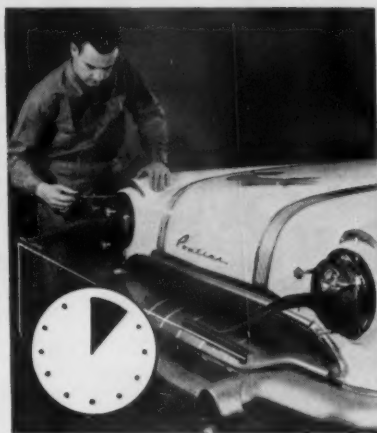
AFTER 3½ MINUTES—Guide T-3 Safety-Aimers slipped on "Guide Points"!



and aim headlamps in less than 10 minutes!



AFTER 5½ MINUTES—lamps aimed horizontally with twist of screwdriver!



AFTER 7 MINUTES—beams are aimed vertically . . . headlamps off!



8½ MINUTES' TOTAL TIME—aimers removed . . . bezels replaced. . . job done!

T-3 headlamps are featured on all General Motors cars and trucks for 1956 . . . are available now for replacement of all other sealed beam headlamps!

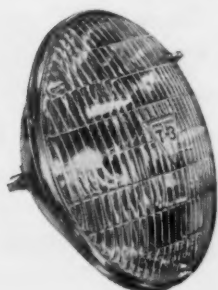
Every car and truck that rolls off a GM assembly line today is factory-equipped with T-3 headlamps. That in itself is a tremendous replacement market for you as a dealer—approximately half of all new cars built. These headlamps are now available for replacement in every vehicle now in use. *That* market runs into millions more.

T-3 aimers and T-3 headlamps help make night driving safer than ever before. With Guide T-3 Headlamps your customers can be sure of all the wonderful advantages built into the recently

announced improved sealed beam headlamps.

But, headlamps must be perfectly aimed to provide the better visibility for which they were designed and only the authorized Guide T-3 Safety-Aim dealers can do it! That's a story with real selling power . . . one that can mean extra sales and extra profits for you, too.

Get in on the ground floor. A representative stock of Guide automotive lamps and Guide T-3 Safety-Aim Headlamps, plus low-cost T-3 aimers, puts you in business as an authorized Guide dealer.



Sell them in pairs!

**The complete line
of GUIDE AUTOMOTIVE LAMPS
is available from your REGULAR**



SUPPLIER

The fastest movers travel the road

The Saturday Evening

POST

Here's a list of the leading automotive advertisers that appear in the Post. It will pay you to feature their products—for they are the fastest-moving in the business!

AUTOMOTIVE ADVERTISERS IN THE SATURDAY EVENING POST

As of January 1, 1956

CARS • TRUCKS • TRACTORS • TRAILERS

Allis Chalmers Mfg. Co. Crawler and Wheel Tractors, Road Machinery, Motor Graders, Centrifugal Pumps, Institutional

American Coach Co. American Trailers

American Motors Corp. Rambler Cars

Arcoa, Inc. U-HAUL Rental Trailers

Briggs & Stratton Corp. Briggs & Stratton Gasoline Engines

Boick Division Buick Cars

General Motors Corp. Cadillac Cars

Cadillac Motor Car Div. General Motors Corp.

Caterpillar Tractor Co. Caterpillar Tractors, Graders, Earthmoving Equipment, Diesel Engines

Chevrolet Motor Div. Chevrolet Cars, Trucks, Station Wagons

General Motors Corp. Institutional

Chrysler Corp. Chrysler Cars

Chrysler Sales Div. Chrysler Corp.

Continental Div. Continental Cars

Ford Motor Co. Cushman Trucksters

Cushman Motor Works, Inc. De Soto Cars

De Soto Div. Chrysler Corp.

Detroit Diesel Engine Div. General Motors Corp.

Dodge Car Div. Chrysler Corp.

Eshelman Co., Chestnut L.

Euclid Div. General Motors Corp.

Fisher Body Div. General Motors Corp.

Ford Div. Ford Motor Co.

Ford Motor Co. General Motors Corp.

GMC Truck & Coach Div. General Motors Corp.

Hudson Motor Car Div. American Motors Corp.

Imperial Div. Chrysler Corp.

Innocenti Company

International Harvester Co. Lincoln Div.

Ford Motor Co. Mack Motor Truck Corp.

Mercury Div. Ford Motor Co.

GM Diesel Engines

Dodge Cars, Trucks, Station Wagons

Midget Autos, Motor Scooters

Euclid Earthmoving Equipment

Fisher Bodies

Ford Cars, Trucks, Station Wagons

Institutional

GMC Trucks, Truck Engines, Diesel Tractors

Hudson Cars

Imperial Cars

Lambretta Motorized Vehicles

International Trucks, Institutional

Lincoln Cars

Mack Trucks

Mercury Cars, Station Wagons

Nash Division American Motors Corp.

Oldsmobile Div. General Motors Corp.

Packard Division Studebaker-Packard Corp.

Plymouth Div. of Chrysler Corp.

Pontiac Motor Div. General Motors Corp.

Reo Motors, Inc.

Schult Corp.

Stewart Coach Industries, Inc.

Studebaker Div. Studebaker-Packard Corp.

Willis Motors, Inc.

Nash Cars

Oldsmobile Cars

Packard Cars

Plymouth Cars, Station Wagons, Institutional

Pontiac Cars, Station Wagons, Institutional

Reo Trucks, Reo Engines, Institutional

Schult Trailers

Stewart Trailers

Studebaker Cars, Trucks, Station Wagons

Jeeps

PARTS • ACCESSORIES • EQUIPMENT

AC Spark Plug Div. General Motors Corp.

Aircraft-McCune Products, Inc.

Airguide Instrument Co.

Albertson & Co., Inc.

AC Spark Plugs, Oil Filters, Fuel and Vacuum Pumps, T-3 Safety-Aim Headlamps

A-MP Super Champ

Airguide Auto Compasses

Sioux Tools

Alomite Div. Stewart-Warner Corp., The

Alliance Mfg. Co.

Allied Motor Parts Co.

Aluminum Co. of America

American Brake Shoe Co.

American Chain & Cable Co.

American Cyanamid Co.

American Enka Corp.

American Trucking Industry

Andrews-Alderfer Co.

AP Parts Corp.

A. R. A. Manufacturing Co.

Armco Steel Corp.

Atlas Supply Co.

Auto-Lite Battery Corp.

Auto Specialties Mfg. Co.

B & K Hoffman

B & K Service Products

Balkamp Inc.

Alomite Lubrication Equip- ment, CO-2 Concentrate Oil Additive, Electronic Wheel Balancers

"Genie" Lift-A-Dor Garage Doors

Allied Metal Valves, Water Pumps, Chassis Parts, Pistons

Alcoa Aluminum for Automotive Parts

American Brakeblok Brake Linings

Weed V-Bar Tire Chains, Institutional

Jetspan Seat Covers Institutional

FABRICUSHION Products AP Mufflers

A. R. A. Automotive Air Conditioners

Armco Stainless Steel Hubcaps, Car Mufflers, Truck Tanks, Guardrails

Perma-guard Anti-freeze

Auto-Lite Sta-ful Batteries, Service Parts, Auto-Life Service

Auto Specialties, Double-Disc Brakes

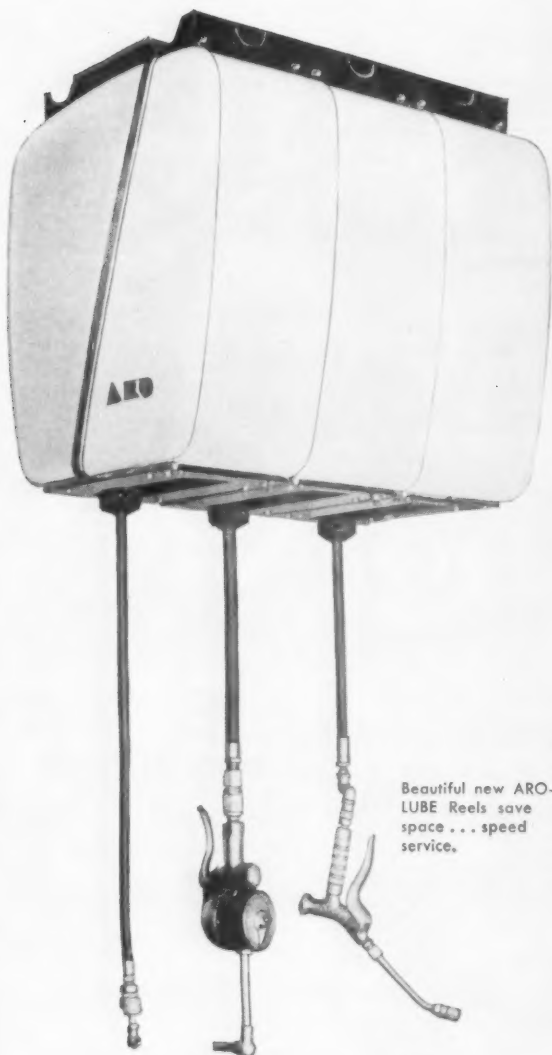
Service Station Equipment

B & K Battery Testers, B & K Anti-freeze

Balkamp Carburetor Kits, Rubber Mountings

NEW AROLUBE LINE

With **NEW
AL-207 PUMP**



Beautiful new ARO-LUBE Reels save space . . . speed service.

The new AL-207 Pump . . . perfected after three years of research and development! Not one failure in 12,260 grease jobs during tests ranging from Arizona to northern Canada. Uses *less* air and *fewer* strokes to pump more lubricant! As for performance, the new AROLUBE line of cabinet models and new lube reels is a world-beater! ARO-engineered and built for extra years of usage, big savings in time and operating costs. See your Automotive Wholesaler now for all the facts!

**The AROLUBE Road Show Visits
These Cities in April . . .**

Tulsa, April 4
Cleveland, April 10
Dallas, April 11

Detroit, April 17
Houston, April 18
Chicago, April 24



**WARRANTED FOR 3 YEARS
OR 10,000 LUBE JOBS!**

ARO warrants the AL-207 Air Motor to be free from defects in workmanship and materials for 10,000 lube jobs or 3 years, whichever occurs first, from date of purchase!

AROLUBE Cabinet Models build lube profits with sparkling performance!



**THE ARO EQUIPMENT CORPORATION
BRYAN AND CLEVELAND, OHIO**

Aro of California, Los Angeles 7, California
Aro Equipment of Canada, Ltd., Toronto 15, Ontario
Offices in All Principal Cities

ARO

LUBE EQUIPMENT
Also . . . AIR TOOLS . . . AIRCRAFT PRODUCTS
. . . GREASE FITTINGS

"LOOK OUT- YOU'LL HIT IT!"

In sudden emergencies, good brakes save lives. Make sure your customers have the best.

Pull a wheel
Look at the brakes
Show the customer what's needed

And when you reline, use Grey-Rock Balanced Braksets, the linings with the difference you can see, show and sell.



SEE the difference. Distinctive Grey-Rock brake linings look different—are different. You can see it in the many different types of linings Grey-Rock combines in sets engineered to give balanced brake action and longer lining life.



SHOW the difference... in distinctive Grey-Rock woven and molded combinations. Where used, they provide far better brake action than molded linings alone. In other Grey-Rock sets, all-molded types give best results.



SELL the difference. When you can see and show the difference, you can sell the difference. Explain how different shoes, even in the same brake, do different work, and why different types of lining are necessary for balanced brake action and long wear.

ASK YOUR JOBBER FOR GREY-ROCK FACTORY-BONDED SHOE EXCHANGE FOR HIGHER RELINE QUALITY, LESS LABOR PER JOB, GREATER PROFITS

Only **Grey-Rock** makes

BALANCED BRAKSET LININGS

GREY-ROCK DIVISION of Raybestos-Manhattan, Inc., MANHEIM, PA.

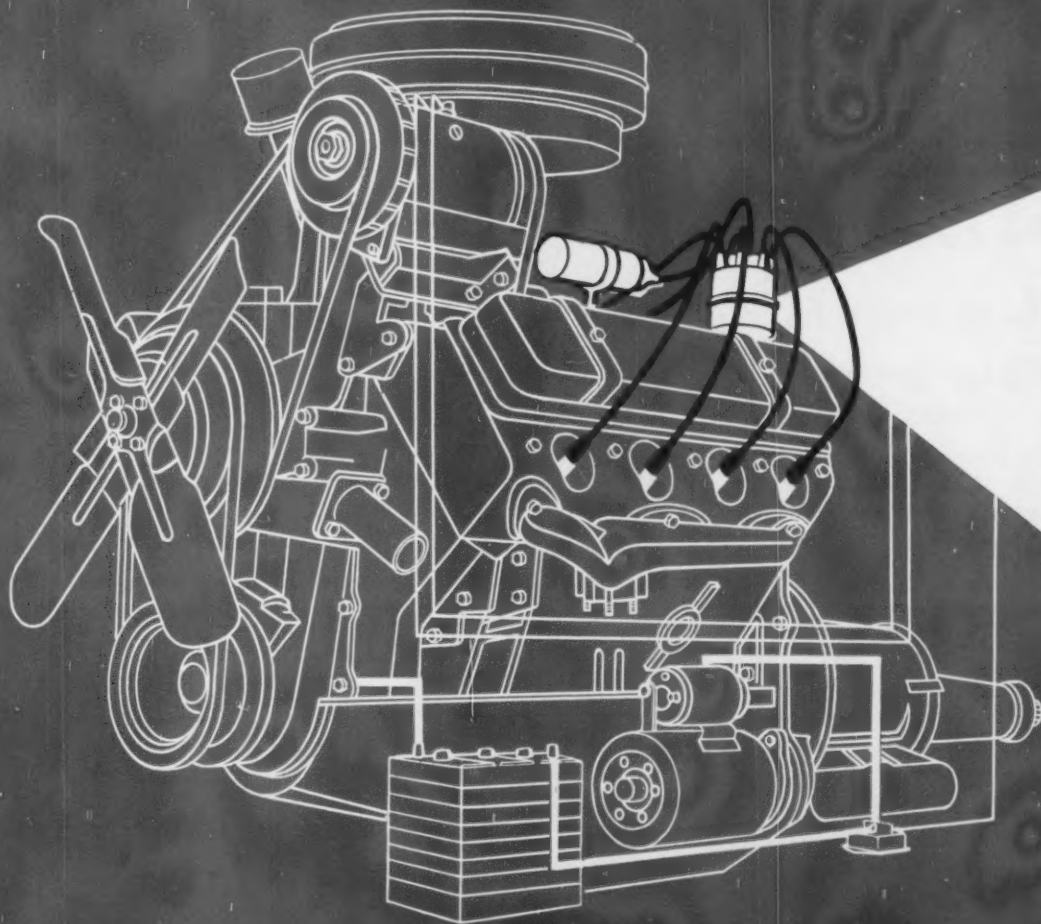


RAYBESTOS-MANHATTAN, INC., Brake Linings • Brake Blocks • Clutch Facings • Industrial Rubber, Engineered Plastic, and Sintered Metal Products • Rubber Covered Equipment • Asbestos Textiles • Laundry Pads and Covers • Packings • Abrasive and Diamond Wheels • Bowling Balls

Consistently advertised in the
POST and **Farm Journal**



Give Your Customers . . . **FULL**



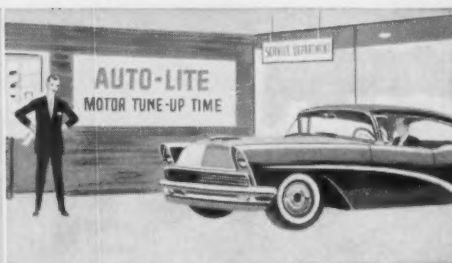
Build Service Profits . . . Increase Sales of Everything You Handle . . .



Save Time . . . Stop 'Come Backs.' Dependable Auto-Lite equipment helps stop annoying profit-reducing 'come backs.' Outstanding performance builds customer confidence that means extra profits from repeat sales.



Helpful Service Information. You get up-to-the-minute bulletins, brochures, and service information sheets. You learn quickly of the latest developments and changes that help you do a better service job.



Selling Material. Auto-Lite helps you with national magazine and outdoor advertising, posters, wall charts and display and selling material. Hard-hitting selling support helps you increase your sales and profits.

POWER PERFORMANCE!

Use AUTO-LITE Original Contact Points in the AUTO-LITE Ignition Circuit

Sell the contact points that are expressly designed for today's modern engines . . . the contact points that give your customers full power performance under all operating conditions. Serve your customers better with Auto-Lite contact points . . . ignition-engineered for dependable performance, and specified by many leading car manufacturers as original factory equipment.

Contact points are cut from end-grained tungsten in order to reduce metal transfer and build-up to a minimum, permitting maximum service life.



Auto-Lite breaker arm has reinforcing rib for extra strength with less weight . . . assuring smooth performance even at highest speeds.



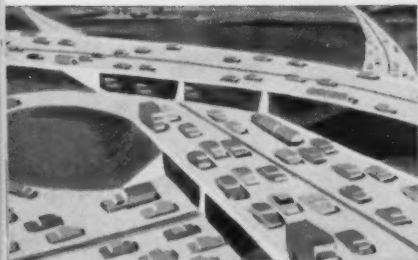
Precision-riveted Auto-Lite rubbing block is engineered and especially designed for accurate contacts up to 50,000 miles.



Size and contour of contacts are carefully controlled to resist oxidation under all operating conditions.



with these 5 BIG AUTO-LITE SELLING ADVANTAGES!



Huge, Ready-Made Market. Millions of Auto-Lite-equipped cars, trucks, boats and tractors give you a huge, ready-made market. These owners are presold on the dependability of Auto-Lite Original Service Parts.

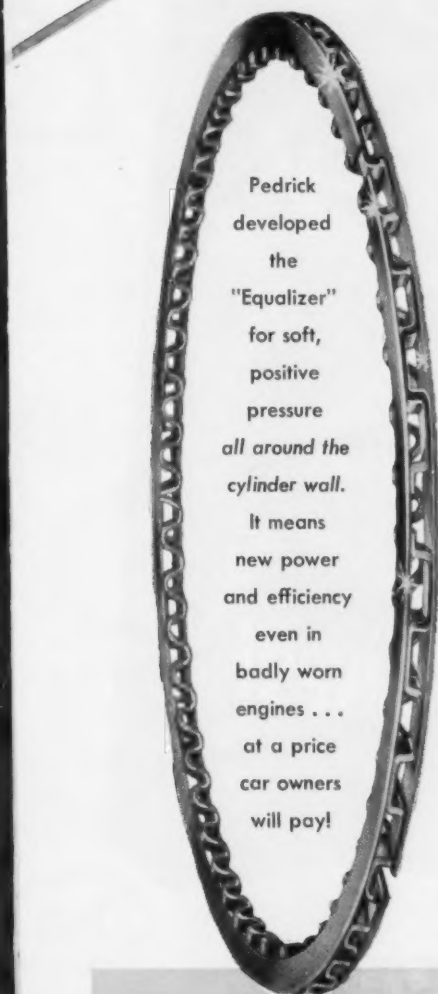


The Auto-Lite Service School in Toledo, and distributor-sponsored field service schools throughout the country, provide specialized training to help you serve your customers better. Contact your Auto-Lite distributor.

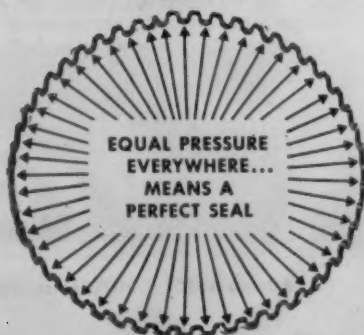


**the rings
that make you
look like a
magician**





Pedrick developed the "Equalizer" for soft, positive pressure all around the cylinder wall. It means new power and efficiency even in badly worn engines . . . at a price car owners will pay!



You look like a magician to your customers if your motor jobs show immediate results

Pedrick Formflex Chrome Rings work like magic even in the toughest installations.

Tired engines pep up instantly and car owners feel the smooth surge of renewed power as soon as they step on the gas. When you deliver immediate results like that . . . you become a "magic" repairman to your customers . . . a magician!

The secret of this magic is Pedrick's exclusive "Equalizer." Its amazing conformability and uniform distribution of pressure results in a quicker, more perfect and longer-lasting seal. POWER is restored immediately while gas and oil consumption are reduced. Your customers feel the difference *instantly*.

So . . . for "quick-as-magic" results always install Pedrick Formflex Chrome Ring Sets.

DEPEND ON

Pedrick

FOR THE RINGS
THAT MAKE YOU
LOOK GOOD

WILKENING MANUFACTURING CO., Philadelphia 42, Pa.
IN CANADA: Wilkening Manufacturing Co. (Canada) Ltd., Toronto



Your customers' safety
is in YOUR hands!



Safe Brakes Save Lives!

You can depend upon WAGNER QUALITY because Wagner Products are used as original equipment by manufacturers of cars, trucks, buses, and trailers.

H50-1

Est.
1891

Wagner

*...the best known
name in brake service*

LOCKHEED HYDRAULIC BRAKE PARTS and FLUID... MeRol... CoMoX BRAKE LINING... AIR BRAKES... TACHOGRAPHS... ELECTRIC MOTORS

...the brand of brake fluid you supply could be the difference between accidents and safe stops

For safety's sake... use genuine

Wagner[®] Lockheed BRAKE FLUID

There's none better... none safer... the leader for more than 30 years... properly balanced chemically... surpasses S. A. E. specifications

When you buy brake fluid, remember that the lives of all your customers, and countless others besides, depend on the quality of fluid you choose. You can't afford to buy less than the best... and there's none better than WAGNER LOCKHEED!

This superior quality fluid is compounded of finest ingredients in the world's largest and most modern plant devoted to the exclusive manufacture of hydraulic brake fluid. It functions efficiently in all seasons and under all driving conditions... mixes with all approved fluids... protects the system against vapor locks, freeze-ups, gummy residue, rapid evaporation of fluid, and deterioration of metal and rubber parts.

Wagner Lockheed Brake Fluids answer all service needs. 21B is for trucks, buses and cars where heavy duty type fluid is recommended or required by state law. Available from your Wagner Jobber in 12 oz., quart, gallon, 5-gallon, 30-gallon, and 54-gallon containers. He can also supply you with Wagner Lockheed Hydraulic Brake Parts and Wagner CoMaX Brake Lining. See him today!



Wagner Electric Corporation
6498 PLYMOUTH AVENUE, ST. LOUIS 14, MO., U.S.A.
(Branches in principal cities in U. S. and in Canada)



TELL ME HOW TO UP PROFITS!

...by becoming a Wagner Franchised Dealer. I understand that there is no charge or obligation.

NAME _____

FIRM _____

ADDRESS _____

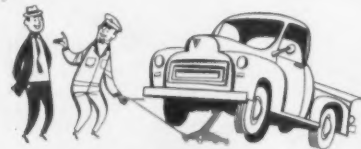
CITY, ZONE & STATE _____



TRANSFORMERS... INDUSTRIAL BRAKES



Speed Shop Service!



Ausco Hydraulic Service Jacks are available in 1-1/4, 1-1/2, 2 (illustrated) and 4-ton models. For heavy service—Ausco 10-ton model.

*with fast - safe
dependable*

AUSCO

Hydraulic Service Jacks

DEMAND AUSCO for faster, more profitable shop service! Ausco Hydraulic Service Jacks are compact, low and rugged . . . forged from the finest materials . . . and backed by the experience Auto Specialties has gained over the years supplying millions of jacks to car and truck manufacturers, garages and service stations.

Feature-Packed Ausco Jacks have swivel wheels for fast, easy positioning indoors and out—won't "hang-up" on uneven surfaces.

Fully enclosed power units lift and release—instantly! Safety locks prevent accidents . . . hydraulic units can be quickly removed for servicing or replacement!



And remember . . . Ausco All-Steel Garage Horses 2 and 5-ton models—hold securely . . . release floor jacks for maximum use!

Call your AUSCO JOBBER . . . SEE, TRY and DEMAND the finest *AUSCO*

AUTO SPECIALTIES MFG. CO. INC., St. Joseph, Michigan • Other Plants in Benton Harbor and Hartford, Michigan and Windsor, Ont. Canada

AUSCO . . . Manufacturers of quality jacks for every automotive need.



Passenger Car Jacks
Bipod,
"Y-Bar",
Ratchet and
Frame
Models



Mechanical Axle
Jacks
Single and Double
Screw Models

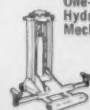


Hydraulic Jack Oil
Pints, Quarts, Gallons

Hydraulic
Transmission
Handlers
Floor and
Pedestal
Models



Hydraulic
Axle Jacks
Std. and
Hi-Range



One-End Lifts
Hydraulic and
Mechanical

What makes customers come back for more?



They'll all come back if you give 'em the best. When it's a bearing job... just tell 'em it's **TIMKEN**!

A free sitter might bring 'em in. But the best way to keep customers coming back is to give them good service. And that always means the best in replacement parts. When it comes to replacing tapered roller bearings, for instance, just tell 'em it's Timken®. It's the best-known name in bearings. The one name in bearings your customers *know* means quality. So, as one good way to keep

'em coming back, always point to the trade-mark "Timken". The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".

TIMKEN
TRADE-MARK REG. U. S. PAT. OFF.
TAPERED ROLLER BEARINGS

NOT JUST A BALL ○ NOT JUST A ROLLER □ THE TIMKEN TAPERED ROLLER □ BEARING TAKES RADIAL AND THRUST —D— LOADS OR ANY COMBINATION —S—





PRE-SOLD

Millions upon millions of cars
are equipped with AC Quality Products
— therefore most drivers are pre-sold
on AC for replacement

In the United States, there are more than eight million rolling advertisements for AC Quality Products! These are cars with AC original equipment—and they are the most effective advertisements any company could have.


Put yourself in the position of an owner of one of these cars—

Your car has given good service for many miles. Then, it needs service . . . a replacement part. Don't you want the same kind of part that the manufacturer had selected for original equipment? Of course you do! And, so do your customers, for their cars!

More than ninety per cent of all cars produced today have some AC products as original equipment. That means that nine out of ten of *your* customers are pre-sold on the AC name.

Need we say more?

Watch WIDE WIDE WORLD and BIG TOWN on NBC-TV

AC SPARK PLUG  THE ELECTRONICS
DIVISION OF GENERAL MOTORS



Blue Sunoco Meets New Higher Premium Standards *Still At Regular Gas Price*



**NO WONDER
IT'S THE BEST
SELLING PREMIUM
GASOLINE IN
SUNOCO
TERRITORY**

PREMIUM IN EVERY WAY

**OCTANE
POWER
STARTING
PERFORMANCE
MILEAGE**

but it's still at regular gas price

Right now Sun's advertising in newspapers, magazines and on the air, is telling car owners why New Blue Sunoco is, today more than ever, America's greatest gasoline value!

It's higher in premium octane quality yet *still sells at regular gas price!*

WANT TO DOUBLE YOUR GALLONAGE?

A Sunoco dealership may be available in your community. Call our local office or write us direct: Sun Oil Co., Philadelphia 3, Pa.



SUN OIL COMPANY, Phila. 3, Pa.

executive section Jobber

News NotesFrom the Editors

NSPA Forms Warehouse Distributors Division

NATIONAL STANDARD PARTS ASSOCIATION has announced the formation of its Automotive Warehouse Distributors Division. The formation and organization of this division had been in process for almost a year before approval by the entire membership.

THE WAREHOUSE DISTRIBUTORS DIVISION will be represented by an executive committee of Warehouse members of NSPA, under the control of the board of directors of the association. It will elect its own chairman for organization purposes.

AEA Tune-Up Charts

THE AUTOMOTIVE ELECTRIC ASSOCIATION recently announced that the 1956 tune-up charts covering the 1956 models of passenger cars are now available.

ACCORDING TO ROY DEAN of Carter Carburetor Corporation, and chairman of the AEA Tune-Up Committee, the AEA Tune-Up System has been developed in conjunction with the manufacturers of original equipment, electrical and fuel systems parts and with the cooperation of the automobile manufacturers.

THE AEA TUNE-UP SYSTEM includes individual charts for each particular make and model of passenger car. These individual charts contain the exact factory specifications and standards of adjustment which are essential for proper engine tune-up work.

"S O S" Badge Program by MEWA

THE NEWLY DEVELOPED "S O S" BADGE PROGRAM of the Motor and Equipment Wholesalers Association is themed to safety, with its initials for "Sell On Safety." It is aimed at increasing sales both at the dealer and consumer level.

THE JOBBER SALESMAN BADGES contain a brief profit story about each product included in the set, illustrating to the dealer how much money he can make by actively pushing safety items to the customers whose cars he services.

Rectangular Electric Motor

A NEW TYPE FRACTIONAL MOTOR, designed initially to power window regulators, seat adjusters and air conditioning units in cars and trucks, has been developed by Leece-Neville Company, Cleveland.

THE MOTOR DIFFERS FROM THE CONVENTIONAL round motors in that it is rectangular in shape, which is said to save space. The motor is available in 6, 12, 24 and 32 volt ranges.

NSPA Adds 76 to Membership

SEVENTY-SIX NEW MEMBERS have been added to the roster of the National Standard Parts Association since the publication of its last supplement. This brings the association membership to an all-time high, according to J. L. Wiggins, executive vice-president.

B-W Sales Up 45% in 1955

SALES CLIMBED TO \$552.1 MILLION in 1955 for Borg-Warner Corporation, more than 45 per cent above 1954. Although the company agrees with forecasts that automobile production will drop slightly, B-W estimates its automotive sales, this year, will closely parallel those of 1955.

U. S. ECONOMYby Neil R. Regeimbal



Watch for Phony Checks/Money

BUSINESSMEN CAN HELP PUT DOWN the rising rate of counterfeiting and check forging by keeping alert this year. U. S. Secret Service, which has its hands full, expects its backlog of cases against these criminals to rise by 1,100.

AGENTS GATHERED IN MORE THAN \$1 MILLION in phony notes and coins in 1955. Even if the Service gets money to hire more agents, the businessman must still guard against gyp artists.

MANY ARRESTS COME AFTER SOME MERCHANT has been "taken" by a bad check artist or counterfeiter, and while punishment may be meted out, it is the businessman who stands the loss.

Tax Cuts Seen This Year

TAX REDUCTIONS, POSSIBLY FOR SMALL BUSINESS and middle-income groups, are still a pretty good bet this year, despite "cautioning" statements by officials. There is a widespread belief that some \$3 billion may be available for tax cuts in the next fiscal year.

Sales Training Subsidized

FEDERAL FUNDS FOR TEACHING HIGH SCHOOL students the rules of selling will be stepped up if the Senate goes along with a House-passed bill. The bill would supply \$2.6 million for student training in the 12 months beginning July 1, compared with the present \$1.5 million.

STATE FUNDS ARE ADDED to the federal money to run classes for the students. Subjects taught include selling, buying, and stock control.

OPERATION

JOBBER

Stress Spring Selling Season

PRELIMINARY reports indicate that automotive jobbers experienced a healthy increase in business during the first quarter of 1956, closely following earlier "fair weather" predictions made a few months ago by several industry experts. With "fair weather" selling signs still flying strong, second quarter service and parts sales are expected to sustain and implement the gains already made.

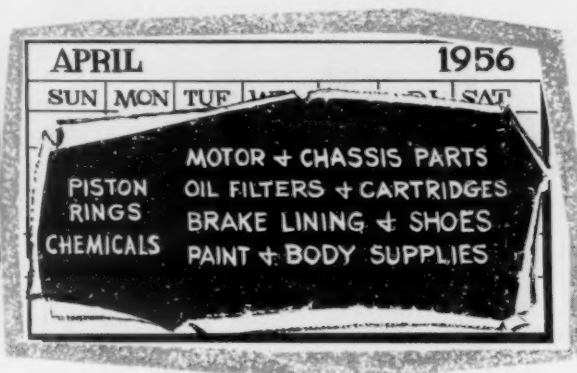
Spring Selling Season

The Spring Selling Season is opening up strong in most sections of the country, which means the time is ripe to add more steam to jobber advertising programs. Seeds planted now, and well fertilized with strong Key Line selling and merchandising campaigns, will yield bigger harvests in volume in May, June and July.

Hot items for the April-May period should include the six products shown in the calendar—illustrated elsewhere on this page. These Key Line bread-and-butter products represent approximately 21.5% of the average jobber's volume and therefore should have big **EMPHASIS** now!

TIP: If you haven't already done so, set up special quotas on each of the six featured products of the month. A good

**PRODUCTS
TO
FEATURE
THIS
MONTH**



way to start is to check sales on each product by months for 1955 and then establish a reasonable quota for the same special period in 1956. Don't make quotas too high and kill salesman enthusiasm.

In High Gear

With the spotlight on products that produce 21.5% of yearly volume, a well conceived advertising and sales promotion program should be put into high gear. These products deserve counter and window display space for three to four weeks. Send out letter stuffers on these lines. This action will integrate your special selling and merchandising efforts—thus giving you a greater opportunity to meet quotas and establish new

highs on your sales records and charts.

TIP: Write or call the advertising managers of your suppliers for ideas and advertising material to help you give these featured products a big boost. They will be complimented by your request.

Forget Publicity?

The car-driving public is pretty well acquainted with the most of the Key Lines you sell—more so than you or your customers probably realize. Don't forget to work toward special publicity stories featuring products of the month in the local paper! Here again, it is recommended that you call on the advertising manager for publicity material because most of them have such material readily available.



By **RUSSELL W. CASE, JR.,**
Publisher
Motor Age, Commercial Car Journal,
and the Chilton Motor Age Manuals

GENTLEMEN, this portion of your program is concerned with the market which lies ahead—the climate in which your manufacturing and wholesaling businesses are going to flourish in the foreseeable future. Probably the most appropriate title for this discussion would be—"Let's Get Down to Some Steady Thinking."

After the second World War, a startling change began to occur in our economy. The new American market emerged and, in ten years, it has astounded all economists. Why? Well, they have been trying to measure the new economy by the rules used since 1920. It simply hasn't worked, because all economic activity begins and ends with people, and people were rapidly changing into a new kind of consumer. There are still very few in the top income bracket, but, now, even

Let's Get Down

A condensation of the February address delivered before assembled delegates of the National Standard Parts Association Convention in San Francisco, California

fewer in the lowest. What happened is that practically everybody has pushed himself into the middle-income group—the \$4,000 to \$7,500 level. And while the economy has grown swiftly since 1945, it has grown more homogeneous. Since its real income is rising, its purchasing power is also rising, and this tremendous increase in purchasing power for things beyond the basic necessities of life is creating a market that is growing more varied as it becomes larger.

The retailing of automotive service is also undergoing deep-seated changes. There are about 124,500 outlets capable of doing major repair work. Of them, 44,500 are car and truck dealers and that number is gradually decreasing. It shrank a little over 1,000 last year.

There are approximately 80,000 independent repair shops by whatever name you want to call them. We have always been a classification-happy industry, gentlemen. At one time we had in the Chilton Trade List Department over 58 different



to Some Steady Thinking



and overlapping terms which had been applied to these independent repair shops, depending on who was doing the classifying.

Retailer Rendering Services

The point I want to make is—let's stop quibbling about whether an outlet is a super service station or a brake service specialist or a garage and recognize one basic condition.

Many people have lost sight of the fact that the automotive service outlet is a retailer, like any other retailer, rendering the services he is capable of performing and on which he can make a profit. The collection of services he offers is subject to countless variations.

We all know that appearances are deceiving and that service outlets cannot always be accurately defined or labeled. Identities frequently merge. An independent repair shop may find extra profits in selling gas and oil, thereby appearing to be a gasoline station. On the other hand, a gasoline station may break out a "mechanic on duty" sign and merchandise its repair service, taking on the function of a repair shop.

Regardless of the appearance of the shop or the name over the door, if service in volume is being sold, there you will find experienced personnel in charge. For skilled service men do most of the repair work volume.

All of these men are "Automotive Service Specialists" with a common need for up-to-date information about automotive parts, tools, equipment, accessories and supplies; for service data; for management and merchandising information, and it is up to you and your trade press to keep them supplied with it.

Now, taking an over-all look at our market, we see that at the end of 1955 we had 51 million passenger cars and 10 million trucks and buses on the road—a total of 61 million vehicles. Registrations will increase to around 64 or 64½ million vehicles by the end of 1956.

Of the 1955 passenger car registrations, about 23,250,000 of them are in the age bracket where they need major repairs—from four to nine years old inclusive. Back in 1951 there were only about 6 million in this same age group. The number of cars in this major repair group will decline only

(Continued on page VI)



... Steady Thinking

Continued from Page V

about 1 million, to 22½ million cars, by the end of 1956, and cars under four years of age will increase materially to around 20,300,000.

The most significant and important point that I want to make today is, that *while registrations have nearly doubled since the end of World War II, the number of retail outlets have stayed approximately the same, meaning far greater potential of service business for each service establishment. . . . We have today—total car dealers, repair shops, filling stations and fleets—approximately 400,000 service outlets, and that is just about the same number that were in operation in 1930 serving 25 million vehicles. Today, they must service 61 million—better than twice as many.*

Looking at it another way, the automotive service industry represents a great deal of stability. Its potential lies not in growth of service shops, but rather growth within these service shops.

Truck & Fleet Market

Prior to 1941, approximately 20,000 fleet operators operated not much more than a million vehicles. Then came the war and the tremendous need for mobility and these operators grew in number to 28,000. But they grew even faster in acquiring more and better equipment until today they account for the majority of the truck freight hauled through the operation of 2¾-million vehicles.

For you, the market represented by these 28,000 fleet operators is unique in that it is easily accessible, for more than two-thirds of these operators are in the top 100 cities; unique in that selling costs are lower, for the average fleet buyer is 71 times more a buyer of automotive products than the average small truck owner and repeat

business is more easily obtained; unique because fleet operators practice preventive maintenance, servicing their vehicles and replacing parts sooner and more often than the average non-fleet vehicle.

Independent Repair Shop

As the third part of this discussion, let's spend a few minutes discussing where is the automotive service business and hope to clarify some other misconceptions. Let's start with the independent repair shop.

1. Big business is done by the small shops. A check of Census figures reveals that 74% of all the independent repair shop business is done in shops employing no more than five people.

2. Most of the shops are located in the smaller communities and in suburbs of big ones. It's where car-owning people live, garage their cars, run their errands, etc., that most cars are serviced and repaired. That's why 50% of the independent repair shops are located in towns of 10,000 and under.

New Car Dealer

Let's look at the new car dealer:

1. Most of the service is done in the smaller communities and the outlying districts of the larger cities. 80% of the car dealers are located in towns of 25,000 population or less. Service is a major part of their total business and they service all makes of cars. In fact, many car dealers are the only repair shops for miles around. And, only 15% of the car dealers have 20 or more employees, as shown in the last census.

2. The man responsible for service is the buyer who may function under the title of service manager or parts manager, but he is more likely to be owner or partner. Some employ automotive service specialists to run their businesses for them.

Finally, and most importantly, we all recognize that the Automotive Service Specialist, whether he be an independent repair shop or a car dealer, is the true consumer of the automotive service industry. He is the man that determines the kind of brake lining or piston ring or muffler or fan belt that gets installed in your car and mine.

In conclusion, gentlemen, it's hard to imagine a more optimistic market picture. All of the factors in our over-all economy and in our particular industry situation are in your favor. It doesn't take much courage to predict with reasonable certainty a sparkling 1956 and a spiraling, favorable automotive service business for at least 10 years to come.

signs of the times

MEWA's Executive Development Study

The Motor and Equipment Wholesalers Association has completed study of a survey of wholesalers on their recommendations for executive development. In cooperation with the Bureau of Business Management of the Univ. of Illinois, a committee of MEWA members has set up a program of study. This program deals with the managerial aspects of automotive wholesaling.

A one week course of training will begin May 6 and run through May 11. Classrooms and living quarters will be at the Univ. of Illinois' Robert Allerton Park, Monticello, Ill. Inquiries for registration should be made to NEWA at 309 W. Jackson Blvd., Chicago 6, Ill.

Distribution Topic For CAWA Meeting

Stressing the importance of the manufacturer through wholesaler to retailer method of distribution, the California Automotive Wholesalers' Association took action on many distribution inequities at a meeting of the Board of Directors of the group, held on February 23rd and 24th in San Francisco at the Whitcomb Hotel.

It was the unanimous opinion of the officers and directors of the CAWA that closer cooperation with manufacturers — as well as with other wholesalers in California—will go a long way in providing a stabilizing feature.



AT A SOCIAL gathering during the recent convention of the National Standard Parts Assn. in San Francisco are (l. to r.): George Stout, President, George W. Stout, Inc.; Duane Jones, Adv. Mgr., United Motors Service Division of General Motors; Herman Tector, Advertising Director, Perfect Circle Corp.; R. K. McConnell, Advertising Manager of the Service Division of the Federal Mogul Corp.; C. C. Tapscott, formerly a Vice President of the McQuay-Norris Mfg. Co.; and Fred Talento, Automotive Merchandising Manager of LOOK Magazine. The party was given by LOOK in honor of M. R. ("Bud") Darlington, Jr., Director of the Inter-Industry Highway Safety Committee.

Owatonna Building

A modern, single story structure, now under construction on the outskirts of Owatonna, Minn., will eventually house the manufacturing facilities and offices of the Owatonna Tool Co., according to a recent announcement by A. R. Kaplan, president.

Owens-Corning

Owens-Corning Fiberglas Corporation is expending its product line for the automotive industry. With the trend toward air conditioning of cars, the company expects that the use of its insulations will grow apace as insulated cars will tend to reduce the size and cost of the cooling unit.



RUSSELL W. Bischof (left) and William J. Burns of Carter Carburetor Corp. chat with R. A. Harp (right) at recent graduation ceremonies of the Carter Personal Instruction courses held in conjunction with Harp's firm, the Auto Equipment & Service Co. The ceremonies took place in Phila.

Motor Age's Who's Who

William J. Hobbs has been named chairman of the executive committee and a member of the



board of directors of Hickok Manufacturing Company. He is a former president of the Coca-Cola Company.

Eric G. Boehm has been named general manager of the Hydraulics Division of Houdaille Industries, Inc.

Robert N. Black has become manager of export service sales for the replacement division of Thompson Products, Inc.

Earl C. Chatfield has been appointed field sales manager of the engine rebuilder division of Muskegon Piston Ring Co.

Willis J. Oldfield has been appointed sales promotion manager of AC Spark Plug Division of General Motors.



Horace R. Finney is now associated with Tung-Sol Electric, Inc., in lamp sales and engineering. He formerly was a manager of sales at Westinghouse.

Mel Gailzaid has been named sales manager of the eastern division of Choldun Manufacturing Corporation. **Edward Jennings** is now head of the central and western sales divisions of Choldun.

Mel Cain has been named district representative covering northwestern states for Ammco Tools, Inc.

Frank deNeveu has been named assistant sales manager of Burgess Vibrocrafters, Inc.

Byron B. Phillips, left, has been elected vice-president in charge of finance and treasurer of Holley Carburetor Company. **Carl Hof-**



meister, right, has been elected vice-president in charge of planning and new products for Holley.

William Vyn has taken over the Detroit sales territory for Rinsched-Mason Co. **Robert C. Aikin** succeeds him as industrial sales manager.

W. W. Eaton has been appointed sales manager of the Mohawk Chief division of Northeast Motor Rebuilders, Inc.

Thomas J. Quinn has been appointed general sales manager of Grobet File Co. He joined the company's sales staff four years ago.

John S. DeNoia has become automotive sales manager for the Permacel Tape Corporation.

Henry A. Nichols has been advanced to the post of regional manager for The AP Parts Corporation. He will centralize all midwestern sales and distribution activities for the company.



J. P. Stine has been named east coast zone manager for Thor Power Tool Company. **C. B. Baron** is the new west coast zone manager and **R. J. Burch** was appointed southeastern zone manager for Thor.

William J. Bender has been appointed vice-president of King Electric Equipment Company. He has been associated with the company for six years.

Clinton F. Hegg, vice president, L.O.F. Glass Fibers Company, has taken charge of the Company's newly created automotive sales division.

Dr. John S. Young has been appointed automotive industry specialist for the plastics sales section of E. I. du Pont de Nemours and Co.

David A. Coulter has been named as sales counsel for the



Bonney Forge & Tool Works. Mr. Coulter also has been elected to the board of directors.

*The Figures Speak
National Car Show
HP Going Up, Up, Up
Parts Program Revisions
Ford Goes Push-Button
Curved Glass in '57
Ball Joint Suspension*

The Figures Speak: "Business Is Good"

DESPITE ALL GLOOMY TALK about car production and sales, records for the first quarter indicate business was very good. Production of 1.8 million was the second highest for a first quarter. Sales figures are not yet available but they too were good and probably second only to the 1955 peak for that period.

National Automobile Show Revived

THE AUTOMOTIVE INDUSTRY WILL REVIVE the National Automobile Show next December 8 through 16 after a lapse of 16 years. The show will be held at the new Coliseum in New York, which has 300,000 sq ft of exhibit space available.

CARS AND TRUCKS OF AMERICAN MAKES will be on display, but foreign manufacturers will not be invited to participate this year. It is possible that they may be included in future shows.

IN 1956 THE NUMBER OF MAKES EXHIBITED is expected to number 21 and possibly 23 if Packard's Caribbean and Cadillac's El Dorado are classified as separate makes. Nineteen truck or coach makes are expected to be displayed by 18 manufacturers.

AM to Continue Ambassador and Hornet

REPORTS THAT AMERICAN MOTORS will drop the Ambassador and Hornet lines soon are inaccurate. While sales in these two lines have been disappointing, the company has no present plans to discontinue them in the near future.

Plymouth Won't Get New Transmission This Year

EXTENSION OF CHRYSLER'S NEW 3-SPEED automatic transmission across all the corporation's lines this model year is highly unlikely. Production of the new units is being increased but requirements of the Imperial and Chrysler models will take up most of the output.

IN ANY EVENT, IT WILL BE MANY MONTHS before enough of the new transmissions will be available to appear on the Plymouth--not before the 1957 models are announced.

Push Button Turn Signals

TURN INDICATOR LEVERS WILL BE RELOCATED on several cars in 1957. Chrysler will have a toggle type unit on the dashboard. Reports are that another company will have buttons on the dash, one for right turn, another for left, and third for emergency blinker.

It's Up, Up, Up for HP

THE TREND TOWARD HIGHER HORSEPOWER in passenger car engines will continue in 1957. The increased output will come about largely from higher displacement engines.

ONE OF THE BIG THREE LOWEST PRICED MAKES will offer a V-8 with displacement one inch larger than Cadillac and Chrysler initially offered when they introduced their modern V-8 power plants a few years ago.

Parts Program Revisions Due

FORD AND CHRYSLER PLAN CHANGES in their parts programs to match GM's increased obsolescence factor under the new franchise provisions. Mo-Par plans to retain its 2 per cent cash discount but it will work out something new in dealer benefits.

IT FIGURES THAT OBSOLESCENCE actually is a problem in only 20 per cent of the parts handled by the dealer. Both Ford and Chrysler are canvassing the dealer body preparatory to making changes to improve the parts setup.

Ford to Go Push Button in '57

HENRY FORD II HAS CONFIRMED that his company will offer push button automatic transmission controls in at least part of its line next year. He made the statement during the Monroney hearings in answer to a question about uniform location of automatic transmission controls. GM also is reported interested in push button transmission controls located in the steering wheel.

Service Specialist Shortage Grows

AN EXAMPLE OF HOW SERIOUS the service specialist shortage is getting can be found in Saginaw, Mich. Repair shops in that city, in conjunction with the Saginaw traffic safety department, are enlisting the aid of high school students to help out in a forthcoming automobile safety inspection program this May.

YOUNG VOLUNTEERS, USUALLY HIGH SCHOOL mechanics students, will undergo a one-day training session on proper procedures in inspecting lights, tires, sheet metal and other minor safety points on an automobile. Regular mechanics, who can be spared by garages during the inspection program, will guide the youngsters.

An Individual Body for Pontiac

REPORTS INDICATE THAT PONTIAC NEXT YEAR may have its own individual body in at least one model. Currently, it shares basic body panels with Chevrolet. Pontiac finds itself squeezed between the top of the Ford, Chevrolet, and Plymouth lines and the lowest priced models of higher priced makes, such as the Buick Special.

A MOVE TOWARD AN INDIVIDUAL BODY would be in the direction of somewhat larger dimensions in order to pull away from the low-priced field and be more competitive in the middle price range.

Glass Curves Will Show in 1957

CURVED GLASS SIDE WINDOWS and a windshield that wraps over into the roof will appear on at least one high priced automobile for 1957.

COST, HOWEVER, WILL BAR CURVED WINDOWS in lower priced cars for the present, although it is hoped eventually to make them competitive in price with regular flat glass.

Producing "Fury"

PLYMOUTH HAS INCREASED THE PRODUCTION GOAL on its "Fury" model to 5000 a year from the original 1500. The company reportedly does not want to go above that figure, however, in order to retain the Fury as a prestige car.

Ball Joints May Take Over

BALL JOINT FRONT END SUSPENSION will be universal on 1957 model cars, according to the latest information. All companies are very much interested in ball joints because of easier steering and fewer lubrication points.

New Suspension Meets Some Problems

MAJOR PROBLEMS HOLDING BACK air bag suspensions on passenger cars are cost, space, and air supply. With the systems currently used on trucks and buses a compressor and accumulator tanks are required for a constant supply of air.

IF PROBLEMS CAN BE LICKED, however, air bags offer definite advantages. Level height can be maintained regardless of the load and compensators could be used to feed air to the high side of a car on curves for greater stability.

Washington Wireby Ray M. Stroupe



NADA Working Conferences

BOOSTING DEALERS' PROFITS is a major aim of new programs opened by the National Automobile Dealers' Association. In line with that aim, NADA sponsors the first working conference for new car and truck dealers, who will meet in New York on April 27.

ATTENDING ARE TO BE 500 RETAILERS from the northeastern U. S. NADA plans other working conferences for dealers in the rest of the nation.

Dealers Campaign Against Bait Ads

NEW CAR AND TRUCK ADVERTISING that dangles false bait in front of customers is on the decline. Dealers themselves are carrying out a campaign against the blitz-type ads.

ONE GROUP NOW AGREED ON STANDARDS for keeping ads sane is made up of Chevrolet dealers in the Washington area. Members are pledged to tell the public the facts about the cars and the places that sell them.

Surplus Equipment May Go on Sale

MILITARY FORCES MAY DECIDE soon to sell surplus equipment for cars and trucks through selected civilian firms. But first they will try this means in marketing spare electronic and aircraft parts.

IF THE TRIAL TURNS OUT WELL, the same sales method will be used for automobile equipment and other items. The idea is to get a fair return for unneeded materials without upsetting normal prices for them.

Automotive Bills

CONGRESSIONAL WORK OF SPECIAL INTEREST to car dealers takes place in the House this month. Public hearings are being held on automobile bootlegging, phantom freight, and territory security bills.

AUTOMOBILE BUILDERS AND GOVERNMENT OFFICIALS are testifying. The National Automobile Dealers Association supports all these bills.

New Car Buying Plans Are Plentiful

SOME GOOD NEWS FOR CAR DEALERS is turned up by a new Federal Reserve Board look at consumer buying plans. The FRB reports that around 8 per cent of consumers contacted say they intend to buy new cars this year, while 7 per cent expect to buy used cars.

More Military Shops to Close

FURTHER TRIMMING OF MILITARY-RUN automobile repair services is on the Pentagon schedule. Defense Department officials tell Congress they are prepared to close 19 repair shops in the East, Midwest, and South.

THEY ALSO PROPOSE TO SHUT DOWN 20 motorpool shops at bases scattered from New Jersey to California. These shops are handling jobs that can be done at reasonable prices by civilian service specialists.

Light-Weights Will Get Brunt of Highway Costs

BIG-SCALE HIGHWAY BUILDING will be paid for chiefly by the car and light truck drivers, the U. S. Bureau of Public Roads points out. It figures that of 62 million vehicles on the roads less than 1 per cent are trucks in the over-30,000-lb class.

CAPITOL HILL PLANS CALL FOR higher fuel, tire, and truck, bus, and trailer taxes to bring in road funds. Also included is a proposed new tax on heavy trucks.

Just Patented—Automobile Entry Tool

SERVICE CENTERS MAY GET A NEW TOOL to help customers who have locked themselves out of their cars. The U. S. Patent Office has patented an "automobile entry tool" with a narrow metal scoop angled from one end.

THIS SCOOP IS USED IN WORKING open the glass vent in a window frame, after weather stripping around the vent is pressed down. A ring at the other end of the tool can be used to crank down the main window.

Dealers on Safety Committee

FRANCHISED AUTOMOBILE DEALERS have two new spokesmen on the Inter-Industry Highway Safety Committee. Just named to the group are Frederick M. Sutter, of Columbus, Ind., and Dean Chaffin, of Bozeman, Mont.

MR. SUTTER, FIRST VICE PRESIDENT of the National Automobile Dealers Assn., is a Dodge-Plymouth retailer. A Cadillac-Buick-Chevrolet dealer, Mr. Chaffin heads the NADA National Affairs Committee.

Smogless Muffler

CAR EXHAUST GASES PASS THROUGH TWO FILTER CHAMBERS in a new "smogless muffler" the government has patented for George Jenison, Yuba City, Calif. It mixes air and water with gases to help cut down eye irritation and the chance of monoxide gas poisoning.

Report to Our Readers



More Parts Needed

WE'VE just completed a new study on the number of cars in use by age and by state and it proves one thing for certain. The number of cars in the age bracket—most likely to need service — four to nine years old — has jumped.

Distribution of Cars in Use by Age Groups and by States

Shown in Per Cent of Total Cars in Each State

STATE	AGE GROUP					
	Under 4 Years		4 to 9 Years		9 Years and Over	
	1955	1954	1955	1954	1955	1954
Ala.....	36.77	37.97	46.67	42.59	16.56	19.44
Ariz.....	33.83	34.72	46.23	41.96	19.95	23.32
Ark.....	37.84	39.22	46.24	41.92	15.92	18.86
Cal.....	32.36	33.15	43.32	39.43	24.32	27.42
Col.....	32.85	33.73	47.96	43.92	19.47	22.35
Conn.....	37.00	37.61	44.91	39.97	18.09	22.42
Del.....	39.05	43.19	45.06	41.40	15.87	15.41
D. of C.....	47.19	47.65	45.52	43.67	7.29	8.88
Fla.....	41.37	41.37	45.00	42.44	13.63	16.19
Ga.....	39.50	40.47	44.96	41.29	15.82	18.24
Idaho.....	34.31	36.80	47.17	42.13	18.52	21.07
Ill.....	44.10	45.85	46.29	42.90	9.61	11.25
Ind.....	39.42	40.28	47.37	43.50	13.21	16.22
Iowa.....	34.99	36.07	47.63	43.30	17.38	20.63
Kan.....	35.82	36.63	46.30	41.98	17.88	21.39
Ky.....	32.92	34.48	46.06	42.54	19.02	22.98
La.....	42.20	42.28	45.54	43.13	12.26	14.59
Me.....	35.60	35.20	44.65	40.63	19.75	24.17
Md.....	46.09	39.37	41.99	42.66	9.92	17.97
Mass.....	36.23	36.62	45.79	41.54	15.95	19.84
Mich.....	49.93	50.42	41.53	39.17	8.84	10.41
Minn.....	35.24	36.47	45.81	41.15	18.95	22.38
Miss.....	38.44	40.07	45.48	41.73	16.08	18.20
Mo.....	35.67	34.43	45.40	40.25	18.93	25.32
Mont.....	37.64	40.44	45.98	41.07	16.38	18.49
Neb.....	32.81	35.89	47.11	41.16	20.08	22.95
Nev.....	37.11	39.52	43.76	39.63	19.13	20.85
N. H.....	38.86	38.02	44.61	40.59	16.53	21.39
N. J.....	40.53	41.42	46.31	42.42	13.16	16.16
N. M.....	39.92	40.68	46.88	44.09	13.20	15.23
N. Y.....	41.48	42.22	46.55	42.36	11.97	15.42
N. C.....	34.80	37.29	47.83	43.22	17.37	19.49
N. D.....	35.87	38.76	46.36	41.37	17.77	19.87
Ohio.....	38.86	40.07	48.77	44.95	12.37	14.98
Okl.....	35.57	35.77	45.84	42.41	18.58	21.62
Ore.....	32.96	34.98	44.95	40.10	22.06	25.22
Pa.....	39.81	41.99	46.81	41.93	13.68	16.06
R. I.....	35.53	35.34	45.89	42.07	18.58	22.59
S. C.....	32.18	34.21	45.91	41.01	21.91	24.78
S. D.....	32.66	34.96	49.04	44.33	18.40	20.71
Tenn.....	37.18	38.20	47.56	43.31	15.26	18.49
Texas.....	42.15	42.53	45.54	43.35	12.31	14.12
Utah.....	32.11	34.67	49.84	44.55	18.05	20.56
Vt.....	35.05	38.44	45.95	41.02	16.39	19.54
Va.....	38.06	39.15	47.37	44.12	14.57	16.73
Wash.....	28.37	32.38	47.89	41.79	23.74	25.83
W. Va.....	31.75	33.81	46.94	42.05	21.31	24.14
Wisc.....	36.00	38.48	46.88	41.66	17.12	19.86
Wyo.....	37.24	39.65	47.33	42.69	15.43	17.66
Avg.—U. S.....	38.46	39.46	45.91	42.00	15.63	18.54

Take a close look at the figures shown here and note the changes which have taken place in (mid-year) 1955 over 1954. Forty-two per cent of all cars in use in 1954 were of an age that needed replacement parts and regular service to maintain their efficiency. Last year, the number in that group rose to nearly 46 per cent—a healthy indication that service business, while it's good, it figures to grow bigger and better.

The Kings Depart

LAST month marked the passing of two most colorful competitors in automobile racing—Ralph De Palma and Lou Moore.

To describe Lou Moore as a master mechanic is to dull the phrase. To call Ralph De Palma a champion of champions would be lily gilding. Both men left their marks in a field where their skills and perfections did much to accelerate the progress of our industry.

Lou Moore was in the pits and at the track when he was stricken in Atlanta. He died shortly after the 100-mile race began at Lakewood. A consistent winner as a driver, his reputation as a builder of winning race cars and as a mechanic and master mind in the pits was second to none. His Blue Crown Specials, handled by such drivers as Bill Holland and Mauri Rose, made money-making history.

One of the true gentlemen of the track, Ralph De Palma died of cancer which reportedly originated from an old racing injury.

Winner of the Indianapolis "500" in 1915, he was AAA national champion in 1912 and 1914. He was elected to the racing hall of fame in 1954.

Faithfully yours,

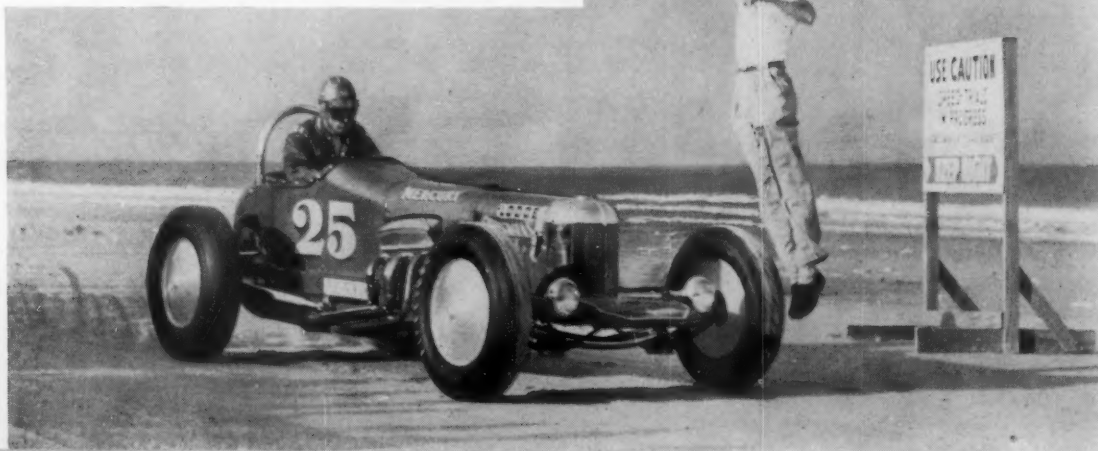
Frank P. Tighe

EDITOR



GLAMOROUS glimpse of the "Seat Covers of the Future" was presented recently at a unique Trimerama Display by the National Association of Auto Trim Shops. The lovely pajama-top clad chorus of the hit show "Pajama Game" (then playing in Chicago) gathers around the international Golden Seat Cover trophy in the photo above. This exhibit helped stimulate industry-wide interest in the importance of seat covers for the fashion-conscious motoring public at large.

TAKING OFF on his winning run at Daytona, Fla., drag racing competition is Art Chrisman, 26, of Compton, Calif. Chrisman pushed his Mercury powered dragster to a top speed of 118.421 mph in the quarter-mile acceleration race. The drag racing events were sponsored at Daytona by the Automobile Timing Association of America.



SWEET SUE Spears in western attire holds copy of *Motor Age's* Salute to the West issue (Feb., 1956). Standing by is *Motor Age's* Assistant to the Publisher Charles W. Hevner. At recent Pacific Automotive Show, Sue helped distribute copy of *Motor Age* to every exhibitor. Attractively-mounted ad easels were also distributed to the magazine's Feb. advertisers in attendance at this west coast show.



SERVING AS reconnaissance eyes and ears are the new 8-pound tactical television camera and the handy-talkie radio of the U. S. Signal Corps. In this U. S. Army photo, soldier at left has the radio. Soldier at right takes 'battle pictures' with TV camera. Equipment on his back is transmitter to beam pictures back to his command post.



DRINKING EXPERIMENT—Norvin T. Vonderhite, one of the 16 subjects of an experiment conducted by the Southern Police Institute in Louisville, Ky., is shown being helped into a car after having drunk 12 ounces of whiskey. The police school is conducting an Alcohol and Road Traffic test to determine the reactions to alcohol and the efficiency of blood and breath alcoholic content testers. Each of the subjects had a Louisville policeman with him at all times and to take him home after the test had been finished.



Latest Contest Winner Announced



Miss Laura Barnes is shown receiving the artist's original painting for the December issue from Jack Montgomery, Technical Editor of Motor Age.

WINNER of the December Cover Contest was Miss Laura Barnes, Purchasing Agent for B & G Auto Parts Company, Poplar Street, Hanover, Pa. Miss Barnes submitted the following prize-winning letter on the topic: "What I liked best about the December issue of MOTOR AGE."

"I liked best about this, the December issue of MOTOR AGE and all issues of MOTOR AGE—are the yellow pages. In it, it gives News Notes, Jobber Operations, Signs of the Times, Who's Who and News-coop all in a condensed form which is vitally important in the every day operation of business.

"Next of interest to me are the pages on new products and new accessories. Here you read and know about new items before you often have a chance to anywhere else.

"Pop O'Neill's portrayal of everyday events of human interest problems makes interesting reading and provides a bit of relaxation.

"Shop kinks provides simple answers to mechanics' problems and by so reading I am often able to pass a helpful hint along to one of our customers.

"All in all I think MOTOR AGE a very versatile Automotive Magazine. By reading the articles I mentioned above I'm sure most businesses can feel as complacent as MOTOR AGE's December Issue portrayed on the Cover. Thank you."

Presentation of the artist's original painting of the December (1955) cover was made to Miss Barnes in Hanover in February. (December's cover featured the automotive business owner relaxing in a chair with a "sales and service" chart behind him showing a progressive rise for the year 1955.)

April Contest

To enter the contest for the April cover painting—reproduced elsewhere on this page—simply write a letter on your business stationery telling the editors of MOTOR AGE: "What I liked best about the April issue of MOTOR AGE." Sign your name and title.

The contest is opened to all subscribers of MOTOR AGE (excepting employees of Chilton Company, publishers of this magazine). There is no entry fee whatsoever. All letters

received become the property of Chilton Company and none can be returned.

The April contest closes Tuesday, May 15, 1956. Letters for this contest must be postmarked not later than midnight on May 15.

Attractive Frame

The full color painting which will be awarded measures 16½ inches x 22 inches. This painting will be attractively mounted and framed for hanging in the winner's place of business, his office, or his den.

Writing style, grammar, are not essential factors in winning any of the monthly contests. It is your ideas, your thoughts on what you like best in this issue that count.

As mentioned last month, winners of any of the 1955 cover contests are eligible to compete again for a 1956 cover painting.

The winner of the April (1956) Cover Contest will be notified by telephone or by telegram. Details on the winning letter, the winner and his firm, will appear soon thereafter in MOTOR AGE.

Don't delay, write and mail your entry letter today!



This is a reproduction of the artist's original painting for the April cover.



EXPERIMENTAL CAR, THE XM TURNPIKE CRUISER, was unveiled earlier this year by the Mercury Division of Ford Motor Co. Transparent plastic "butterfly" openings have been inserted in steel top over the two front seats and automatically raise when the doors are opened for entrance or for exit.

Engineering Highlights



by Joseph Geschelin
Engineering Editor

Wiles to Head GM Dealer Relations

The election of Ivan L. Wiles as an executive vice president of General Motors in Charge of Dealer Relations was announced last month by Harlow H. Curtice, president of General Motors.

Wiles has been general manager of Buick, a vice president of General Motors and a member of its Administration Committee since November 1948. Since June of 1954 he also has been a member of the General Motors Board of Directors and of the Corporation's Operations Policy Committee.

Arkansas IGO Holds Officers Election

Officers and directors for 1956 were elected recently by the Independent Garage Owners of Arkansas. The association, which has headquarters in Little Rock, elected Fred Walloch as president; Forrest Wilson, first vice president; William Blatter, second vice president; and William Mayfield, secretary and treasurer.

Directors of the association are: Gene McRoberts, Sam Dorr, William Budd, Jr., Roy Pruett, Lonnie Reed, and Lawrence Kittle.

SINCE the advent of high performance, high horsepower engines during the past six years or so, there has been a hue and cry about the widening use of high powered engines. During the first few years of their emergence everyone talked about "The Horsepower Race." Eventually that term lost its meaning as practically every make of car from the lowest priced to the luxury models began to offer high power.

More recently, practically every car maker has given added emphasis to the meaning of torque in the constant search for improved performance.

Why Horsepower?

Meanwhile, the critics — and there are many—have been carping about big engines. Why so much horsepower? How does it contribute to safety, if indeed they grant that safety is compatible with more power. How soon will motor car producers see the light and begin to stress smaller engines, greater economy, and smaller cars? These are recurring questions.

The matter needs clarification and light. It is no secret that leg-

(Continued on page 100)

1956 RETAIL CAR SALES BY PRICE GROUPS*

Price Group	Number of Sales			
	1955		1956	
	Units†	% of Total	Units†	% of Total
Under \$2,000	75,405	17.68	220,677	50.46
\$2,001 to \$2,500	235,466	55.21	142,622	32.61
\$2,501 to \$3,500	95,527	22.51	36,056	13.27
Over \$3,500	19,614	4.60	16,013	3.66
Total	426,472	100.00	437,370	100.00

Dollar Volume of Sales*

Price Group	January			
	1955		1956	
	Dollars	% of Total	Dollars	% of Total
Under \$2,000	\$145,941,485	14.60	\$419,736,496	42.68
\$2,001 to \$2,500	504,235,260	50.45	332,525,799	33.82
\$2,501 to \$3,500	267,603,462	26.77	165,470,308	16.83
Over \$3,500	81,714,192	8.18	65,577,085	6.67
Total	\$999,494,399	100.00	\$983,309,688	100.00

*—Calculated on basis of new car registrations, as reported by R. L. Polk & Co., in conjunction with advertised delivered price at factory of four-door sedan or equivalent model. Does not include transportation charges or extra equipment.

†—New registrations of American made cars only. Does not include imported foreign cars.



This scene will be reenacted in safety-conscious communities throughout the U. S. during the May voluntary Vehicle Safety-Check program. A Safety - Check lane is a life saver.

Down The Lane to Safety

Millions of lives are guarded by trips down community sponsored Safety-Check lanes

NEW car dealers, independent garages, and service stations will take part in a month-long program during May designed to help motorists maintain their vehicles in safe operating condition. Those who take part will do so for good reasons. Only 13 states and the District of Columbia require periodic motor vehicle inspection. That leaves more than 46 million of the nation's 61 million vehicles without any official program of vehicle maintenance.

In other words, the lives of millions of our citizens depend on the *chance* that owners will maintain their vehicles in safe operating condition. Still other statistics show 18 per cent of

An important positive action, the trip down the Safety-Check lane permits the driver to take to the open highway with an added sense of security.



all passenger cars are pre-war models with the average age 6.2 years. These figures highlight the need for the voluntary Vehicle Safety-Check program which has been growing each May since 1947. In 1955, Vehicle Safety-Checks of nearly one and one-half million vehicles showed ONE out of every FIVE in need of maintenance attention.

This May, automotive service establishments will again be urged to offer free, voluntary Safety-Checks of ten items affecting safe operating condition: brakes, front and rear lights, steering, tires, exhaust system, glass, windshield wipers, rear view mirrors, and horn. The checks will be made either at places of business or in community programs having Safety-Check lanes set up on city streets.

Program Sponsors

National sponsors of this program are the Inter-Industry Highway Safety Committee and the National Safety Council, with LOOK Magazine as a co-sponsor for community programs. The sponsors provide "how-to-do-it" guides and manuals giving step-by-step help for conducting a program. Banners, posters, and other promotional aids are also made available at cost for participants. The Inter-Industry Committee and the National Safety Council have field representatives traveling throughout the country to meet with businessmen, public officials, and local committees to help them plan Vehicle Safety-Checks. National sponsors work with automobile and tire companies and other cooperating groups in

urging their support of Vehicle Safety-Check through their radio, television, newspaper, magazine, and outdoor advertising messages.

Community Cooperation

Last May, 422 communities and 17 counties organized and conducted their own Safety-Check programs. In each community, public officials and civic clubs—representatives of all segments of the public—worked together to make Safety-Checks a cooperative and community-wide effort. Committees were formed, plans were made, and hours of hard work contributed to give each city a week-long Safety-Check of its vehicles at check lanes set up on city streets and manned by mechanics loaned by automotive service firms.

Where community Safety-Checks were not planned, new car dealers, independent garages, and others offered free Vehicle Safety-Checks in their service departments. If community Safety-Checks were held, these same groups provided the technical help at check lanes as a public service so motorists got qualified Safety-Checks.

Part of the magic of Vehicle Safety-Check's growth has been the success in turning a nationally planned activity into a cooperative community-wide endeavor. One vital element makes this a valuable traffic safety program. That is participation! The physical process of taking a car to the check lane and having it safety-checked is an important positive action. Everyone, from the community leaders to the motorists, MUST DO SOMETHING! Not just listen,

(Continued on page 118)

M. R. Darlington, Jr., Mng. Dir., Inter-Ind. Highway Safety Comm., shows Frank Tighe, Editor of Motor Age, a map of participating communities. Frank holds award for 1955 Motor Age editorial support.



Replacement Parts

Your Automotive Spring

R

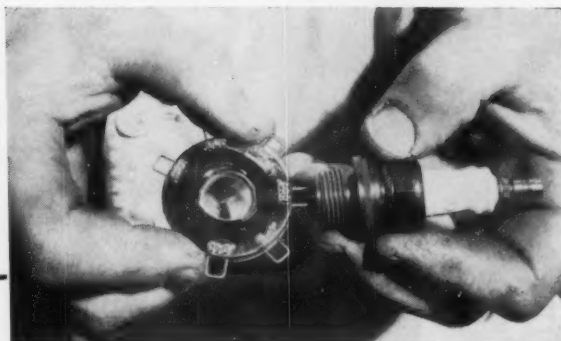
PLUS PROFIT PRESCRIPTION

Spark plugs, covers
Distributor points
Distributor cap and rotor
High tension wires
Coil and condensor
Generator armature
Fan belt, hoses
Voltage regulator
Ammeter
Starter brushes, armature,
switch, solenoid, cables
Battery hold down
clamps, terminals
Water Pump

Thermostat
Fuel pump, filters
Flexible gas' line
Carburetor, cleaner and
overhaul kit
Manifold gaskets
Valves, valve lifters, guides,
cover gasket, springs, keepers
Oil additives
Rust inhibitor
Oil filter
Hose clamps

***Unlimited
Quantity***

Dr. Service Specialist



Tonic

Perk up your Spring sales with "just what the doctor ordered" — replacement parts. They mean extra profits

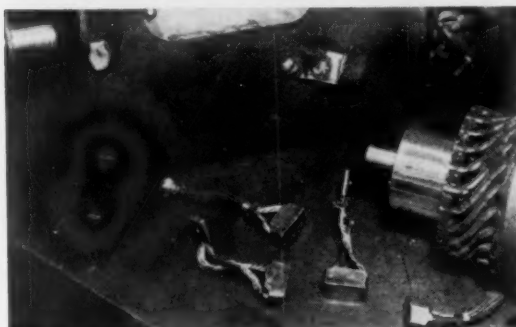
TO paraphrase an old saying: "In Spring a young man's fancy lightly turns to thoughts of cars." You can help strengthen these thoughts from "lightly" to "strongly" by judicious use of display advertising, direct mail pieces, and on-the-scene selling of Spring tune-ups, general overhauls, check-ups, and the like. The boost to your replacement parts turn-over will be amazing besides the profits gleaned from direct labor.

Target Unlimited

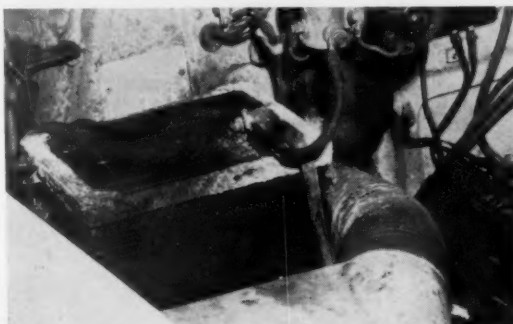
Nor need your target be confined only to
(Continued on page 106)



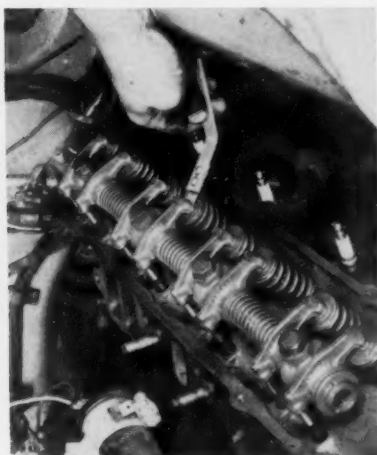
Pencil shows a puncture in the vacuum pump diaphragm that caused wiper failure and engine oil consumption.



It pays to look inside the starter and generator to uncover these jobs. Thorough checks sell replacement parts.



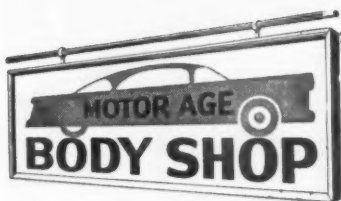
Never overlook the battery connections and clamps. Corrosion accounts for a large number of battery failures.



Feeler gage (left) inserted between valve stem and rocker arm to locate noisy hydraulic lifters.

Shown is correct procedure for removing and installing plugs on Chrysler Firedome engines.





Paint-up, Fix Up Jobs Mean Extra Cash

Start with the interior of the car and clean the headlining;
then proceed with needed 'spruce-up' repairs inside and out

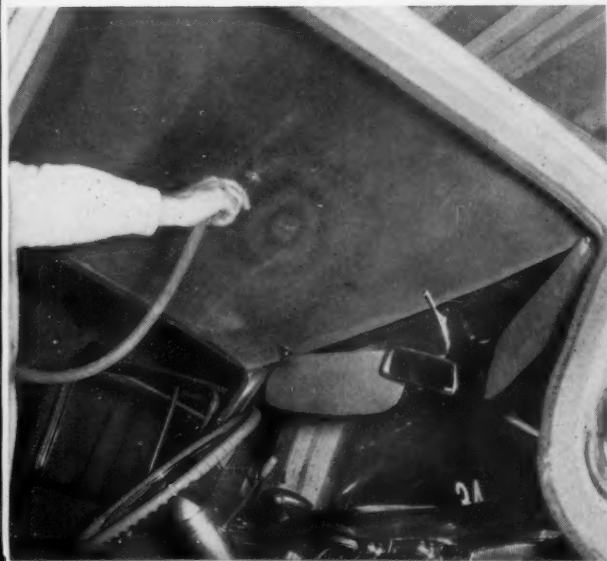
BODY shops can make work for themselves all year around by offering special jobs that are not done too often, such as cleaning the headlining and upholstery.

An outfit in a large city along the Eastern Seaboard, for example, offers a complete inside the car clean-up. This firm has a number of contracts with new and used car dealers to clean their used cars.

All loose dust and dirt is vacuumed and blown out first, then the headlining is sprayed with a

special detergent until it is thoroughly saturated. Then the area is scrubbed with a brush. After this, a special water-proof vacuum cleaner is run across the headlining from side to side to remove dirt and detergent.

Next step is the seat cushions. Cushions are scrubbed with the detergent taken from a bucket and then vacuumed as above. The door panels are scrubbed and wiped down with a rag. Floor mats are scrubbed and vacuumed. After everything is cleaned, liquid saddle soap is applied to all imita-



At left: special detergent is being sprayed on while photo above shows scrubbing operation to loosen dirt.

tion leather areas and also to leather on top of back seat.

Special Equipment

Before getting into the specialized body service, shops should be prepared by having the necessary equipment and stock available. Sell a complete package. Replace all damaged weatherstripping around the doors and deck lids. Reseal all loose weatherstripping. Check doors, deck lid and windows for water leaks. Stop all leaks either by resealing the area or replacing the weatherseals.

Tighten and apply grease stick lubricant to all door checks, latches, striker plates and dove tails. Clean and lubricate all window regulators and door handle mechanisms.

Adjust windshield wiper arms and install new wiper blades. Apply a drop of oil to the windshield wiper pivots. Tighten, clean and apply grease stick to the hood catch and deck lid mechanisms. Tighten all floor plate and window garnish moulding screws.

Tint the Upholstery

On real worn and faded interiors, good results are obtained by spraying the upholstery with a tint which gives it an even color throughout. If upholstery is frayed and worn sell a set of seat covers.

Other areas that are often shabby and weather beaten, particularly on convertibles, are the instrument panels and garnish mouldings. These parts can be refinished with lacquers, synthetic enamel or decals. Floor mats and pedals should be coated with a rubber preservative paint. Materials are also available for refinishing trunk interiors, usually sprayed on in the form of flock or cork-impregnated material.

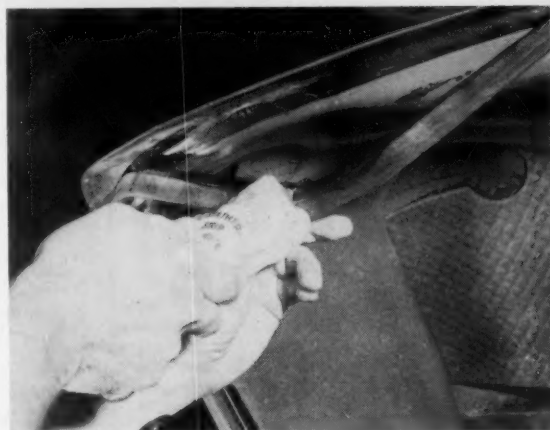
Outside Appearance

The outside appearance of the car naturally will
(Continued on page 110)

Vacuuming to remove loose dirt and surplus detergent suds.



Scrubbing door panel with detergent rinse.



Securing the weather stripping on deck lid.



Sometimes mats may need to be re-cemented.

Car's exterior should receive sprucing-up.





BODY SHOP TIPS

are worth

\$7.50

If you've developed an idea that has helped you to do body and fender work or painting better or faster, it may be worth money. Jot down the idea and, if necessary, make a rough sketch. Sometimes a snapshot will help. Just make the description of your BODY SHOP TIP clear, and if it is used, you'll receive a check for \$7.50.

Removes Hood Without Removing Hood Springs

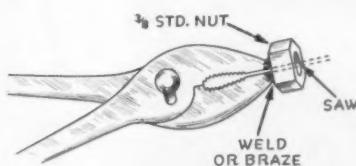
My idea is a simple way to remove a hood without removing the springs. Before taking out any bolts that fasten the hood hinge arms to the hood, drill an $\frac{1}{8}$ inch hole as high up as possible on the arm to which the spring is attached. Pull a wire through the new hole, and fasten it to the rear fender-to-cowl bolt. Then, take out all bolts and remove the hood. The wire will hold the hinge arm and spring in position until you are ready to re-install the hood. When re-installing, put the two shoulder bolts in the arms where the springs are attached, first, then lift the hood as high as possible and install the rear bolts and hinge arms. Do not cut the wire until all bolts are in place. *August W. Schilke, Almena Body Shop, Almena, Wis.*

Gets More Service From Sandpaper by Brushing

Here is a way to cut the sandpaper bill by fifty per cent. When sanding with a rubber block use a small hair brush to remove accumulated dust from the paper. This added measure makes the paper serviceable twice as long. *Bruno J. Otto, Riley Chevrolet, Inc., 511 W. Elm, Jefferson City, Missouri.*

Special Tool to Hold Short Ends of Solder

Lead holders can be made from an old pair of pliers and a three-



eighths nut. Weld the nut to the end of the pliers and then, hacksaw the nut in half. This tool can be used to hold short ends of solder that otherwise would be too hot to hold while working. The threads in the nut keep the lead from slipping. The tool can also be used to remove spring type radiator hose clamps. *Jack Pigg, P. O. Box 602, Ft. Smith, Arkansas.*

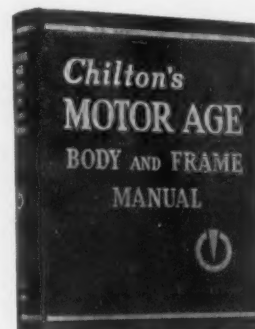
Way to Stop Push Button Handles from Sticking

I have found a way to prevent

the push button door handles on 1955 Plymouth and Chrysler cars from sticking or going over center. To do this, remove the door handle and weld a small washer on the push button shaft. This gives a greater pushing surface against the lock and link assembly. Adjust the unit to allow for the washer so the inside door lock operates properly. *Howard L. Kahl, Rouse Motor Co., Grundy Center, Iowa.*

Way to Remove Lower Channel from Glass

A fast and safe way to remove the lower channel from glass is as follows: apply a few drops of lacquer thinner to the channel and light with a match. After the thinner has burned away, the channel will slip off with one blow of the hammer. *Frank Toth, Schramm Chevrolet Body Shop, Wentzville, Missouri.*



Other valuable information of the type presented each month in The BODY SHOP is readily available in Chilton's Motor Age Body and Frame Manual.

READERS' CLEARING HOUSE

By Jack Montgomery
Technical Editor



Lifters Noisy Again Soon After Valve Job

We have a 1953 Cadillac on which we did a valve job. The car ran quietly for a few weeks after this but then, the valve lifters got very noisy. We dropped the crankcase, cleaned and checked the oil pump and so on but still have the noise. We then pulled some of the lifters and found them in good condition. We checked the oil pressure and, according to the Chilton Manual, it is perfect. This car has about 28,000 miles on it.

Albert J. Coleman
Orange, New Jersey

USUALLY when this happens to an engine it is due to dirt in the system, incorrect oil level in crankcase—too high or too low. If the level is too high, foaming may result. If too low, air may enter the pump inlet. In either case, noisy valve action may result. If the valves were refaced and the seats ground, the lifter clearance has then been changed. This change could cause the lifters to leak. The lifters should be removed and thoroughly cleaned and reassembled dry. Check the pressure needed to compress the spring. If the pressure required to compress the spring to .35 of an inch is less than 6½ pounds the assembly should be replaced. To check for faulty lifters before removing them from engine place each cylinder in firing posi-

tion. Apply pressure to the back end of the push rod and note the time it takes to bleed the lifter. Compare the time of the good lifters with the bad for an average.

Tractor Rocker Arms Are Not Getting Oil

I am working on an Oliver Diesel 88 on which the rocker arms do not get oil. The oil comes up through the block, through the center of a drilled head bolt to the arms. The passage is clear in the block but seems clogged below. From what source does this passage get its oil? Where do you think I am likely to find the stoppage.

D. E. Miller
Boody, Illinois

THE oil to the rocker arms feeds from the rear camshaft bearing. Applying compressed air to the line should clear the obstruction.

Excessive End Play In Chev. Crankshaft

A 1951 Powerglide Chevrolet came into my shop recently, for a ring job. When I got the pan down I discovered that it had excessive end play in the crankshaft. So much, that the number 1 throw was rubbing against the front main bearing cap. In checking the rest

TROUBLE SHOOTING PROBLEMS

- Lifters Noisy After Valve Job
- No Oil to Rocker Arms
- Cure for Excessive Crankshaft End-Play
- Engine Loads Up, Stalls on Idle
- Engine Stalls When in Reverse
- Answers to Some Buick Problems
- Poor Gas Mileage, Lack of Power
- Trouble With Blocks Cracking

of the mains I found that they fit the shaft very poorly. Would a misalignment in the mains or the block cause the shaft to run so far forward?

Harley Evers
Upland, California

THE correct end play on your engine is .004 to .007 inch. To get this clearance, replace the rear intermediate main bearing (this bearing has flanges on it). I would suggest replacing this bearing and adjusting the remainder of them. I doubt whether the trouble was caused by misalignment.

Truck Carburetor Loads at Idle Speed

We have a 1955 Ford TK-F600 equipped with a Holley carburetor that loads up on the idle and stalls. We have tuned the engine and checked the carburetor thoroughly, but the problem still exists. Can you suggest a way to lick this problem?

Fawn Grove Service Station
Fawn Grove, Pa.

THE first thing to check is for excessive fuel pump pressure. If pressure is normal check the carburetor needle valve and seat condition and reset the float level. Also try running the engine without the

(Continued on page 130)

Inside Delco's New

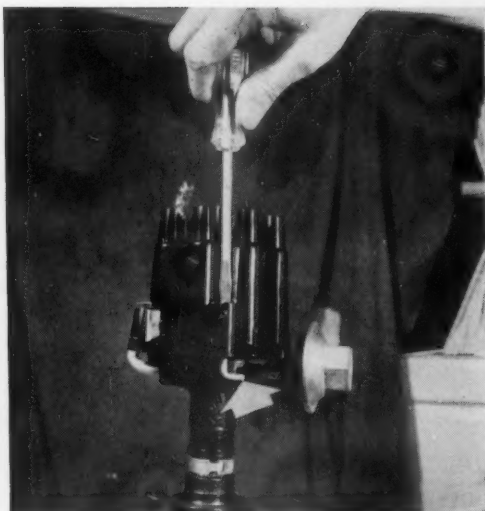


Figure 1. Loosening distributor cap lock screws. It is important to push down on screw before turning.

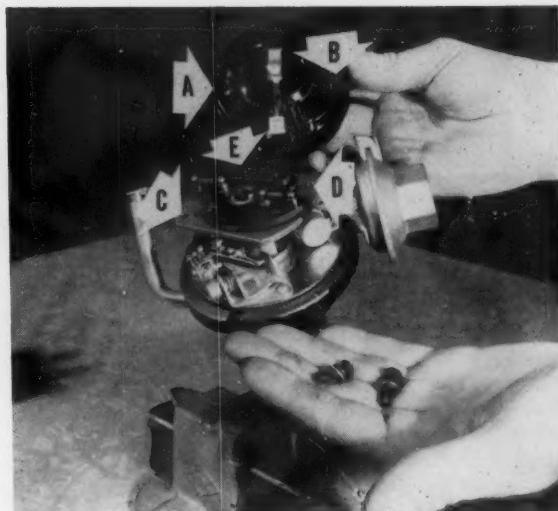


Figure 2. Exploded view shows rotor and points where attaching screws are placed. E is the advance unit.

Found on 1956 Cadillacs and Oldsmobiles, this distributor presents no real

THIS new type of distributor requires new servicing procedures. The cap no longer has snap clips to hold it in position but is removed by loosening two locking screws, one on each side of the cap with a screwdriver. These screws are spring loaded and must be pushed down before turning. After both screws have been loosened remove the cap. The "L" part of the screws have an index flange which engages in the cap to prevent screws from loosening. If screws are turned without first pushing them down cap will become damaged.

Disconnect the distributor primary wire from the coil and disconnect the vacuum advance

line. Crank engine until top dead center for number one cylinder on balancer is reached. Remove distributor hold down nut and clamp. Lift distributor from engine. Note: the rotor will turn slightly while lifting the unit from the engine as the drive gear becomes disengaged from the teeth of the camshaft gear. It is advisable to crank the engine until the copper contact on top of the rotor points directly to the rear of engine before removing distributor. This will insure correct engagement of drive gear teeth with the camshaft teeth to retain proper timing when installing the distributor.

Distributor



Figure 3. Single square hole helps in correct assembly. It prevents rotor from being put in backwards.

problem to the well equipped shop

The ignition points, condenser, and vacuum unit are all contained in the base of the distributor, with the large rotor completely covering them. The rotor can be lifted off by removing the two screws holding it in place. When installing the rotor the screws go through cap at arrows (see Fig. 2, A and B) and are threaded into the advance plate at holes arrow C and D.

Arrow E points to the entire centrifugal advance mechanism which is housed by the rotor. The large rotor is so constructed that it is impossible to install incorrectly. In Fig. 3

(Continued on page 108)

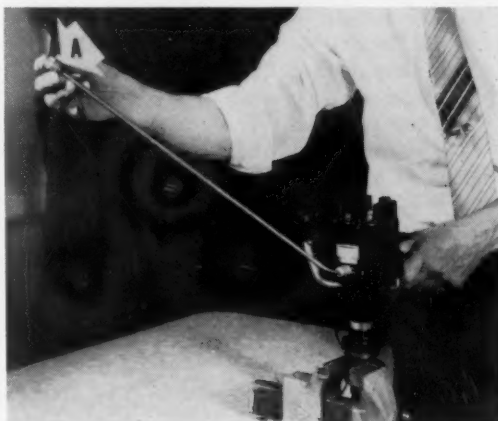


Figure 4. Point gap is adjusted by inserting the Allen wrench A into nut B. Clockwise move increases gap.



Figure 5. After removing the attaching screws B, lift out vacuum unit turning it slightly to free pin A.

Figure 6. Using a special long flexible shaft attached to an Allen wrench for adjusting points in a car.



Motor Age Shop Clinic Quiz



An absorbing and easy-to-do

Quiz of ten questions based

on the article on pages 50-51

How well did you read the Quick Service article on pages 50 and 51 entitled "Inside Delco's New Distributor?" This month's Quick Quiz is based on this article. Answers appear in the box upside down in the lower right corner.

The first five questions of the "Shop Clinic Quiz" are either a multiple choice type or a question where a reason is called for in giving the answer.

The last five questions are either true or false. If one statement in a question is false even though other statements are true, treat the question as false.

After taking the Quick Quiz, total up your correct answers. Six right is considered passing; seven, fair. If you get eight, good; nine or ten — excellent!

1. The cap of the new distributor no longer has snap clips to hold it in position. It is removed by loosening (three), (two) locking screws.

2. These screws are spring-loaded and should first be pushed down with a screw driver before turning to loosen. Why?

3. Before removing distributor, it is advisable to crank the

engine until the copper contact on top of the rotor points directly to the (front), (rear) of the engine.

4. Referring to question 3, why is it advisable to perform this cranking operation before lifting off the distributor?

5. Why is it practically impossible to install the rotor incorrectly?

True or False

6. The ignition points, condenser, and vacuum unit are all contained in the base of the distributor and are completely covered by the rotor.

7. In setting points — with the engine not running—a one-eighth inch Allen wrench should be used on the adjusting screw and the point gap set to .014 inch.

8. Although the points may be set with the engine running, it requires removal of the distributor cap.

9. In adjusting the points with the engine running, adjusting screw should be turned clockwise until the engine begins to misfire.

10. Once misfire is achieved, the wrench used on the adjusting

screw (refer to question 9) should be given exactly $\frac{1}{2}$ turn (180 degrees) in the same (clockwise) direction.

Answers to Quiz (turn page upside down)

1. Two.
2. Distributor cap can be damaged as "L" part of screws have index flanges which engage in cap.
3. Rear.
4. It insures correct engagement of drive gear teeth with camshaft teeth to retain proper timing when re-installing distributor.
5. On one side of rotor is square pin which engages square slot in advance plate; opposite side of rotor has round pin to engage round slot of advance plate.
6. True.
7. False, .016.
8. False, adjustment window is used.
9. True.
10. False, $\frac{1}{2}$ turn opposite direction.



Motor Age Merchandising Forum Pays \$7.50 for Your Ideas

MOTOR AGE EDITORS INTRODUCE THIS MONTH a special 4-page Merchandising Forum section in line with its policy of keeping the Automotive Service Specialist the most informed man in his field. Readers are invited to submit their selling and merchandising ideas and experiences (100 words or less). Motor Age will pay \$7.50 for each contribution published.

Specialization in Auto Sales

THE AUTOMOBILE DEALER OF TODAY MUST EMPLOY AN ENTIRELY new series of sales techniques says Byron Nichols, Dodge vice president and general sales manager. "In the past," says Nichols, "The dealer sold two or four door sedans, a station wagon, and a convertible."

TODAY'S SPECIALIZED MARKET, HE NOTES, DEMANDS that a dealer have a well rounded stock of vehicles, in a good variety of colors, if a dealer expects to achieve his fair share of sales.

Secret of Charging Up Battery Sales

ONE OF THE MAIN REASONS FOR VOLUME BATTERY SALES reports the "Exide NEWS," publication of the Exide Automotive Div., is the setting up of battery testing equipment in a handy location and using it constantly to check for possible replacement sales on customer cars.

Small Business Can Compete

SMALL BUSINESSES CAN FOLLOW IN MANY RESPECTS TECHNIQUES of large scale businesses by utilizing specialized services on a part time basis. For example, accounting firms, stenographic services, direct mail concerns, are a few of the services which can be hired, if and when needed, to take care of regular or peak loads.

Customized Quotes of the Month

POINTS OUT THE MINNESOTA AUTOMOBILE DEALERS Association in a recent bulletin: "Automobile dealers have reached a point where they must either tell the truth or pay the consequences. False advertising, bad advertising, misleading advertising--by any name, it smells the same."

IN SAN FRANCISCO AT A LARGE PARTY to mark the festive occasion of opening a new laundromat, the martinis were mixed in washing machines.

Merchandising Made Me A Service Specialist

Sales of replacement part items are consistently
in the profit picture at Caves 'One Stop Service'

IN a small Pennsylvania community in the eastern part of the state stands a One Stop Service operation thriving profitably through successful merchandising techniques. Owner and manager of this nine-man operation in Havertown, Pa., is Joseph Caves.

At the Caves Esso Service Center, Joe offers practically all types of automotive repairs other than body work and heavy duty repairs. A sizeable portion of his income comes from motor tune-ups, front end work, brake relining and sales in general of replacement parts and accessories.

His One Stop Service occupies a corner location. Frontage on the main roadway—a cross-county thoroughfare—is 134 feet. Along the side street, frontage reaches 139 feet. In terms of square feet, his service center runs about 19,000. There is plenty of room for incoming and outgoing cars, outside parking space. Caves' utilizes four gasoline pumps, two to an island.

His building houses a front salesroom and office, a rear office, and two work bays—the latter taking up 900 square feet. By ingenious use of shelves in the work bay areas and the rear storage and office room, Joe is able to store many items received through his volume buying.

Buys by the Carload

He buys tires, for example, by the carload. He figures to sell





Owner and manager Joseph Caves stands by his road service Jeep.

Pointing out areas where replacement parts are needed is important merchandising step.



about 700 this year and will also dispose of a fair share of batteries and replacement parts in general.

He is planning an addition to his building. It will be 30 x 30 feet and give him two more work bays. He will also add a twin-post lift and a set-up for wheel balancing in the new work bays. The principal reason for the addition is that Joe has applied for a license to set up a Pennsylvania State Inspection station at his location.

Merchandising is serious business to Joe Caves. He makes use of direct mail pieces and a cooperative setup with the 'Welcome Wagon.' He has attractive displays on his pump islands, and in prominent locations in the windows of his combination sales room and front office.

Perhaps of all methods of merchandising, Joe lays greatest stress on the personal approach. "Friendliness and willingness to take an interest in a customer's car problem and *see it through* are tremendous factors in merchandising."

Joe goes on to say that "a customer doesn't buy replacement parts and accessories like he would in an automat cafeteria . . . you don't so much 'wait' on a

(Continued on page 122)

MANAGEMENT CLINIC

How to Handle Objections

Says author of this stimulating article on overcoming sales resistance:

Mental attitude of the salesman more important than 'memorized' answers

TOO many sales managers and executives go on the theory that the more answers a salesman knows, the better able he is to meet firmly every objection a prospect can hurl at him instead of crumpling.

While it is certainly true that ready-made answers can help a salesman immeasurably to handle certain types of stock objections, pat answers are clearly not, in themselves, the



Meet article's author: C. G. Davis, partner & sales promotion manager, Stevens-Davis Co., Chicago, Ill.

entire solution to the difficult problem of meeting objections. The mental attitude of the salesman is a far more potent weapon than a memorized answer.

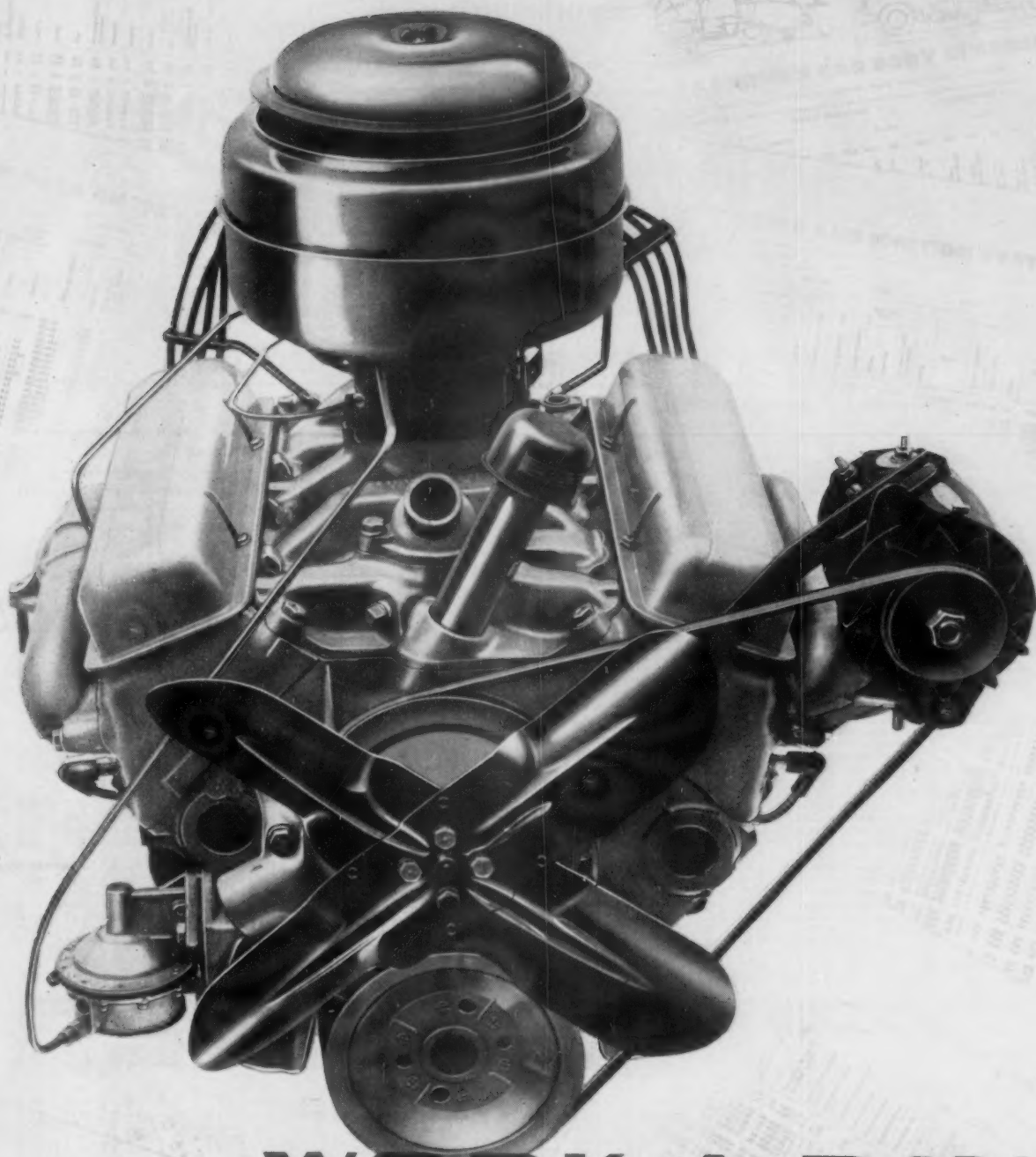
When the prospect advances a reason why he should NOT buy, it is a symptom of an inner mental struggle in which the prospect is tempted to buy and is arguing with himself, expressing outwardly reasons against spending money. Objections and resistances are indications that you have him partially sold. He is simply exploring every avenue, looking for an "out" that will save his pocketbook.

Think back to the times when you have been on the receiving line of a salesman's attempts to induct you to buy something. Can you remember a single instance in which you offered no objections? If so, we'll wager that you didn't buy that day because a little voice kept telling you, "There must be SOMETHING wrong with this. Better check into it further."

Develop Desire

On the other hand, when you do buy, it's only after you have first developed the desire to buy and then satisfied yourself that you could afford it, you wanted it more than some other items you had been considering, your wife would not object, etc.

The desire to buy was there. One side of
(Continued on page 114)

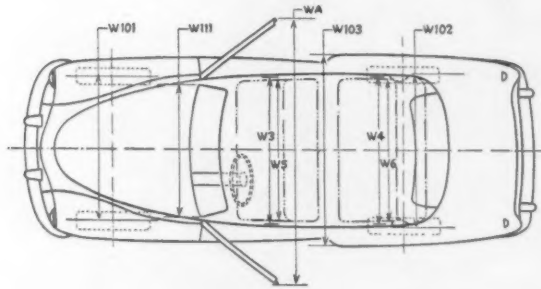


WORK·A·DAY SPECS

ON ALL 1956 CARS

• PASSENGER CARS •

WIDTH DIMENSIONS



1956 PASSENGER CAR BODY DATA

All dimensions apply to 5 or 6 passenger, 4-door sedan or equivalent model.

PASSENGER CAR MAKE AND MODEL	MISCELLANEOUS								GENERAL DIMENSIONS (Ins.)										
	Doors Hinged		Type of Finish	Hood Opening	Hood Counterbalanced	Hood Release Control	Windshield Type	Rear Window Type	L101 Wheelbase	Overhang		Tread		Overall Dimensions				W111 Windshield— Max Width	
	Front Door	Rear Door								L104 Front—Including Bumper Guards	L105 Rear—Including Bumper Guards	W101 Front	W102 Rear	L103 Length— Bumper to Bumper	W103 Width	WA Width— Doors Open	HB Height— Unloaded		
AMERICAN MOTORS CORP.																			
Hudson.....Wasp 35640	F	F	F	Ff	Y	Ex	C	C	114.3	34.9	53.1	59.5	59.7	202.3	78.0	148.3	63.3	62.3	
.....Hornet 35660	F	F	F	Ff	Y	Ex	C	C	121.3	34.9	53.1	59.5	60.5	209.3 ²	78.0	148.3	63.8 ³	62.3	
.....Hornet 35680	F	F	F	Ff	Y	Ex	C	C	121.3	34.9	53.1	59.5	60.5	209.3 ²	78.0	148.3	63.9	62.3	
Metropolitan.....561, 562	F	F	N	F	Y	Ex	IF	3C	85.0			45.3	44.8	149.5	61.5		54.5		
Nash.....Statesman 5640	F	F	F	Ff	Y	Ex	C	C	114.3	34.9	53.1	58.6	59.7	202.3	78.0	148.3	63.3	62.3	
.....Ambassador 5660	F	F	F	Ff	Y	Ex	C	C	121.3	34.9	53.1	58.6	60.5	209.3	78.0	148.3	63.3 ³	62.3	
.....Ambassador 5680	F	F	F	Ff	Y	Ex	C	C	121.3	34.9	53.1	58.6	60.5	209.3 ²	78.0	148.3	63.9	62.3	
Rambler.....5610	F	F	F	Ff	Y	Ex	C	C	108.0	32.0	51.2 ⁴	57.8	58.0	191.1 ⁵	71.3	145.0	59.4	59.8	
CHRYSLER CORP.																			
Chrysler.....Windor C-71	F	F	F	Ff	Y	Ex	C	C	126.0	37.0	56.9	60.4	59.6	219.9	78.8	153.0	62.7	62.0	
.....New Yorker C-72	F	F	F	Ff	Y	Ex	C	C	126.0	38.3	56.9	60.4	59.6	221.2	81.0	153.0	62.9	62.0	
.....300BC-72-300	F	F	F	Ff	Y	Ex	C	C	126.0	36.8	59.9	60.4	59.6	222.7	78.8	155.5	60.6	62.0	
De Soto.....Fireflite S-23, Fireflite S-24	F	F	F	Ff	Y	Ex	C	C	126.0	36.6	55.3	60.4	59.6	217.9	78.3	153.0	62.7	62.0	
Dodge.....Coronet D-62-1	F	F	F	Ff	Y	Ex	C	C	120.0	38.7	53.3	58.9	59.2	212.0	74.6	151.4	62.3	59.5	
.....Coronet D-63-1, Royal D-63-2	F	F	F	Ff	Y	Ex	C	C	120.0	38.7	53.3	58.9	59.2	212.0	74.6	151.4	62.5	59.5	
.....Custom Imperial D-63-3	F	F	F	Ff	Y	Ex	C	C	120.0	38.7	53.3	58.9	59.2	212.0	74.6	151.4	62.7	59.5	
Imperial.....Crown Imperial C-70	F	F	F	Ff	Y	Ex	C	C	149.5	38.1	56.0	61.3	60.8	243.6	79.1	153.0	63.8	62.0	
.....Imperial C-73	F	F	F	Ff	Y	Ex	C	C	133.0	38.1	56.5	61.3	60.4	229.6	78.8	160.0	63.1	62.0	
Plymouth.....Plaza, Savoy, Bel, P-28, P-29	F	F	F	Ff	Y	Ex	C	C	115.0	35.8	54.0	58.4	58.5	204.8	74.6	151.4	62.2	59.5	
.....Fury P-29-3	F	F	F	Ff	Y	Ex	C	C	115.0	35.8	54.0	58.8	58.9	204.8	74.6	165.7	60.4	59.5	
FORD MOTOR CO.																			
Continental.....60-A	F	N	L	F	Y	Ex	C	C	126.0	32.3	57.2	58.5	60.0	218.4	77.5	166.8	57.1	59.3	
Ford.....Mainline, Cust'line, Fairlane 6, 8	F	F	E	Ff	Y	Ex	C	C	115.5	33.9	49.1	58.0	56.0	198.5	75.9	148.9	62.1	59.5	
.....Thunderbird 40-A, 40-B	F	N	E	Rf	N	In	C	C	102.0	27.6	55.6	56.0	56.0	185.1	71.3	148.9	50.2 ⁶	56.6	
Lincoln.....Premiere 73-A, Capri 73-B	F	F	E	Rf	Y	Ex	C	C	126.0	34.9	61.9	58.5	60.0	222.8	79.9	151.0	61.2	61.7	
Mercury.....Custom, Monterey 8	F	F	E	Ff	Y	Ex	C	C	119.0	34.4	53.0	58.0	59.0	206.4	76.4	148.9	62.4	59.5	
.....Montclair 8	F	F	E	Ff	Y	Ex	C	C	119.0	34.4	53.0	58.0	59.0	206.4	76.4	148.9	60.5	59.5	
GENERAL MOTORS CORP.																			
Buick.....Special 40	F	F	L	Ff	Y	Ex	C	C	122.0	33.4	49.6	59.0	59.0	205.1	75.5	145.8	62.0	61.0	
.....Super 50	F	F	L	Ff	Y	Ex	C	C	127.0	33.2	53.5	59.0	62.2	213.6	80.0	147.8	64.1	61.0	
.....Century 60	F	F	L	Ff	Y	Ex	C	C	122.0	33.4	49.6	59.0	59.0	205.1	75.5	145.8	61.4	61.0	
.....Roadmaster 70	F	F	L	Ff	Y	Ex	C	C	127.0	33.2	53.5	59.0	62.2	213.6	80.0	147.8	64.4	61.0	
Cadillac.....60	F	F	L	F	Y	Ex	C	C	133.0	34.2	59.7	60.0	63.2	225.9	80.1	152.4	64.1	61.0	
.....62	F	F	L	F	Y	Ex	C	C	129.0	34.2	51.7	60.0	63.2	214.9	80.1	152.4	64.1	61.0	
.....75	F	F	L	F	Y	Ex	C	C	149.8	34.2	51.7	60.0	63.2	235.7	80.1	150.7	68.2	61.0	
Chev.....One-Fifty, Two-Ten, Bel Air 6, 8	F	F	L	F	Y	Ex	C	C	115.0	34.4	48.1	58.0	58.9	197.5	73.7	140.7	62.0	58.5	
.....Corvette 2934	F	N	L	RA	N	In	C	C ⁷	102.0	24.7	41.4	56.7	58.8	168.0	70.5		52.0	53.6	
Oldsmobile.....88, Super 88	F	F	L	F	Y	Ex	C	C	122.0	33.3	48.0	59.0	58.0	203.3	78.6	137.7	62.3	58.0	
.....Ninety-Eight	F	F	L	F	Y	Ex	C	C	126.0	33.3	53.0	59.0	58.0	212.3	78.6	137.7	62.3	58.0	
Pontiac.....880, 870, 56-27	F	F	L	F	Y	Ex	C	C	122.0	35.1	48.5	58.7	59.1	205.6	75.1	143.2	62.3	59.4	
.....Star Chief 56-28	F	F	L	F	Y	Ex	C	C	124.0	35.1	53.5	58.7	59.1	212.6	75.1	143.2	62.5	59.4	
STUDEBAKER-PACKARD CORP.																			
Clipper.....Deluxe 5640, Custom 5660	F	F	L	F	Y	Ex	C	C	122.0	32.3	57.1	59.7	60.0	215.3	78.0	148.0		59.4	
Packard.....5680, Caribbean 5688	F	F	E	Ff	N	Ex	C	C	127.0	32.3	55.4	60.0	60.9	218.6	78.0	148.0		59.4	
Studebaker.....Comdr. 56B, Pres. 56H	F	F	E	Ff	N	Ex	C	C	116.5	36.4	47.9	56.7	55.7	200.8	71.3 ⁴	135.4	62.0	50.1	
.....Champion 56G	F	F	E	Ff	N	Ex	C	C	116.5	36.4	47.9	56.7	55.7	200.8	71.3	135.4	61.0	50.1	
.....Golden Hawk 56J	F	N	E	Ff	N	Ex	C	C	120.5	34.9	48.6	56.7	55.7	203.9	70.4	151.9	58.1	51.8	

ABBREVIATIONS
 1—63.1 with outside rear tire mount.
 2—219.3 with outside rear tire mount.
 3—63.9 when 7.60/15 tires are used.
 4—58.9 with outside rear tire mount.

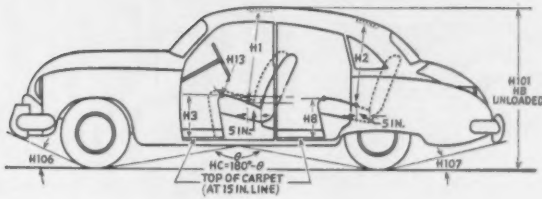
5—198.9 with outside rear tire mount.
 6—Loaded with top down.
 7—One piece flat for convertibles.
 C—One piece curved.
 3C—Three piece curved.

E—Enamel.
 Ex—External.
 F—Front.
 IF—One piece flat.
 FI—Front, full.

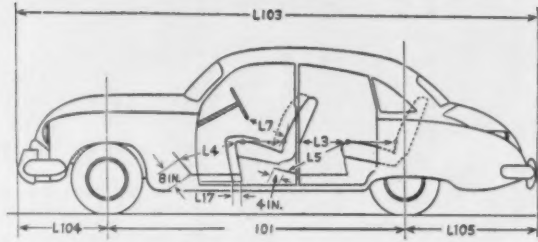
In—Internal.
 L—Lacquer.
 N—No or none.
 RA—Reverse alligator.
 Rf—Rear, full.
 Y—Yes.

• PASSENGER CARS •

HEIGHT DIMENSIONS



LENGTH DIMENSIONS



1956 PASSENGER CAR BODY DIMENSIONS

All dimensions apply to 5 or 6 passenger, 4-door sedan or equivalent model.

PASSENGER CAR MAKE AND MODEL	HEIGHT DIMENSIONS									WIDTH DIMENSIONS				LENGTH DIMENSIONS					
	Interior					Exterior				Interior				Interior					
	H1 Front Headroom	H2 Rear Headroom	H3 Front Seat Height to Floor	H8 Rear Seat Height to Floor	H13 Steering Wheel Clearance to Seat Cushion	H106 Angle of Approach—Deg	H107 Angle of Departure—Deg	H9 Ramp Breakover Angle—Deg	HD Minimum Road Clearance—In	W3 Front Seat Shoulder Room	W4 Rear Seat Shoulder Room	W5 Front Seat Hip Room	W6 Rear Seat Hip Room	L3 Back of Front Seat to Rear Seat Back	L4 Leg Room— Front	L5 Leg Room— Rear	L7 Steering Wheel Clearance	L17 Adjustment of Front Seat	
AMERICAN MOTORS CORP.																			
Hudson.....	Wasp 35640	37.5	36.0	12.5	13.8	6.4	25.0	14.5	13.0	6.3 M	61.5	61.3	65.0	64.5	31.8	42.5	40.1	14.3	5.0
	Hornet 35660	37.5	36.0	12.3	13.8	6.4	25.5	15.5 ¹	13.5	6.8 M ²	61.5	61.3	65.0	64.5	31.8	42.5	40.1	14.3	5.0
	Hornet 35680	37.5	36.0	12.3	13.8	6.4	25.5	15.5 ¹	13.5	6.9 M	61.5	61.3	65.0	64.5	31.8	42.5	40.1	14.3	5.0
Metropolitan.....	561	35.8	N	10.0	N	6.8				6.4 RA	45.3	N	49.8	N	N	43.3	N		4.0
	562	35.5	N	10.0	N	6.8				6.4 RA	45.3	N	49.8	N	N	43.3	N		4.0
Nash.....	Statesman 5640	37.5	36.0	12.3	13.8	6.4	25.0	14.5	13.0	6.3 M	61.5	61.3	65.0	64.5	31.8	42.5	40.1	14.3	5.0
	Ambassador 5660	37.5	36.0	12.3	13.8	6.4	25.5	15.5 ¹	13.5	6.8 M ²	61.5	61.3	65.0	64.5	31.8	42.5	40.1	14.3	5.0
	Ambassador 5680	37.5	36.0	12.3	13.8	6.4	25.5	15.5 ¹	13.5	6.9 M	61.5	61.3	65.0	64.5	31.8	42.5	40.1	14.3	5.0
Rambler.....	5610	36.0	35.0	11.5	14.5	6.0	20.0	13.5 ³	19.0	6.3 FCM	57.7	57.6	59.8	60.1	30.8	43.0	42.0	11.6	5.5
CHRYSLER CORP.																			
Chrysler.....	Windsor C-71	35.1	34.5	13.3	13.7	5.3	17.0	12.0	12.0	6.2 FSM	58.4	58.4	63.3	64.0	32.5	45.7	44.7	15.8	5.0
	New Yorker C-72	35.1	34.5	13.3	13.7	5.3	17.5	12.0	12.0	6.5 FSM	58.4	58.4	63.3	64.0	32.5	45.7	44.7	15.8	5.0
	300-B C-72-300	34.6	34.0	13.3	13.7	5.3				5.8 FSM	58.5	58.5	63.0	55.0	29.2	45.7	41.6	15.8	5.0
De Soto.....	Firemodel S-23	35.1	34.5	13.3	13.7	5.3	19.0	11.0	12.0	6.3 FSM	58.4	58.4	63.3	64.0	32.5	45.7	44.7	15.8	5.0
	Fireflite S-24	35.1	34.5	13.3	13.7	5.3	19.0	11.0	12.0	6.2 FSM	58.4	58.4	63.3	64.0	32.5	45.7	44.7	15.8	5.0
Dodge.....	Coronet D-62-1	35.5	34.9	13.4	12.8	5.4	17.0	11.0	11.0	5.0 OP	58.0	57.8	62.5	62.8	31.2	44.5	45.0	14.8	5.0
	Coronet D-63-2	35.5	34.9	13.4	12.8	5.4	18.0	12.0	12.0	5.5 OP	58.0	57.9	62.5	62.8	31.2	44.5	45.0	14.8	5.0
	Custom Royal D-63-3	35.5	34.9	13.4	12.8	5.4	18.0	12.0	12.0	5.7 OP	58.0	57.8	62.5	62.8	31.2	44.5	45.0	14.8	5.0
Imperial.....	Crown Imperial C-70	37.0	36.3	12.0	13.0	7.0	18.0	11.0	11.0	6.7 FSM	58.3	58.5	63.5	64.5	59.3	42.5	52.5	13.5	3.5
	Imperial C-73	35.1	35.0	13.3	12.7	5.3	17.0	12.0	11.0	6.2 FSM	58.3	58.3	62.5	62.0	34.3	45.7	45.7	15.8	5.0
Plymouth.....	Plaza, Savoy, Belvedere P-29	36.1	35.4	12.4	11.9	6.5	18.5	12.0	12.0	5.4 OP	57.0	55.5	62.5	51.5	30.2	44.0	43.6	15.0	5.0
	Plaza, Savoy, Belvedere P-28	36.1	35.4	12.4	11.9	6.5	18.5	12.0	12.0	5.6 OP	57.0	56.5	62.5	51.5	30.2	44.0	43.6	15.0	5.0
	Fury P-29-3	35.4	34.5	12.4	13.1	6.5	18.0	11.8	11.5	5.1 OP	58.0	57.8	62.5	62.8	27.1	44.0	41.5	15.0	5.0
FORD MOTOR CO.																			
Continental.....	60-A	35.1	34.6	12.8	13.3	5.5	19.0	11.5	10.8	5.9 FC	55.8	53.4	59.6	56.6	26.6	42.5	39.1	15.0	4.3
Ford.....	Mainline, Customline, Fairlane 6, 8	34.9	33.9	12.6	13.1	5.4	23.2	12.0	13.8	6.5 RSA	57.0	56.8	60.5	60.3	29.5	44.3	41.9	15.0	4.9
	Thunderbird 40-A	33.6	N	7.1	N	5.74	23.3	11.8	11.0	5.9	53.3	N	58.8	N	N	45.1	N	14.64	4.0
	Thunderbird 40-B	33.1	N	7.1	N	5.74	23.3	11.8	11.0	5.9	53.3	N	58.8	N	N	45.1	N	14.64	4.0
Lincoln.....	Premiere 73-A, Capit 73-B	35.4	34.1	12.1	12.2	5.0	20.2	11.2	11.7	6.8 FSM	59.4	58.4	61.7	63.8	32.3	44.8	42.5	14.7	5.0
Mercury.....	Custom 8	35.2	33.9	12.0	13.1	5.5	22.2	12.0	13.3	6.8 FSM	57.0	56.8	60.6	60.3	31.6	43.8	42.8	13.9	4.9
	Monterey 8	35.2	33.9	12.0	13.1	5.5	22.2	11.8	13.3	6.8 FSM	57.0	56.8	60.6	60.3	31.6	43.8	42.8	13.9	4.9
	Montclair 8	33.8	32.5	11.5	13.1	5.5	22.2	11.8	13.3	6.8 FSM	57.4	57.5	60.6	60.5	29.2	43.7	40.6	13.7	4.9
GENERAL MOTORS CORP.																			
Buick.....	Special 40	35.6	34.0	12.6	11.5	5.1	22.5	12.6	12.9	6.3 F ⁵	58.2	56.7	62.5	62.4	31.6	42.9	40.9	14.1	4.4
	Super 50	36.6	35.2	13.4	12.6	5.1	23.0	11.5	12.9	6.6 F	58.9	58.9	64.9	65.7	35.0	43.1	45.8	13.5	4.0
	Century 80	35.3	34.4	12.6	12.0	5.1	23.2	13.0	13.4	6.6 F	57.8	56.7	62.5	62.6	31.6	42.8	40.6	14.1	4.4
	Roadmaster 70	37.4	35.7	13.2	13.2	5.2	23.6	13.8	13.3	6.8 F	58.9	58.9	64.9	65.7	36.6	43.2	46.3	13.5	4.0
Cadillac.....	60	35.8	35.1	13.8	12.8	5.4	26.0	15.3	15.8	6.1 FFK	59.5	59.4	64.3	65.2	35.7	43.7	46.3	14.1	4.0
	62	35.8	35.1	13.8	12.8	5.4	26.0	17.7	16.4	6.1 FFK	59.5	59.4	64.3	65.2	35.7	43.7	46.3	14.1	4.0
	75	36.5	35.1	13.8	12.8	5.6	29.5	19.1	16.3	6.7 ER	59.5	59.4	64.4	65.1	35.5	43.4	46.4	14.3	4.0
Chevrolet.....	One-Fifty, Two-Ten, Bel Air 6, 8	35.6	35.6	12.5	13.0	4.7	24.5	15.4	13.9 ⁸	6.5 UEP	56.8	56.4	62.0	63.0	29.2	43.7	42.6	13.7	4.4
	Corvette 2334	36.6	N	8.9	N	4.1	28.2	18.8	14.9	5.8	N	N	N	N	N	41.0	N		5.0
Oldsmobile.....	88	35.5	34.6	13.4	12.3	4.8	21.6	14.6	12.7	6.3 FSM	58.2	56.1	62.4	62.4	31.3	44.4	42.5	14.1	4.0
	Super 88	35.5	33.8	13.1	12.7	4.8	21.6	14.6	12.7	6.3 FSM	58.2	56.1	62.4	62.4	31.2	43.1	42.6	14.1	5.0
	Ninety-Eight	35.5	33.8	13.1	12.0	4.8	21.6	13.2	12.3	6.2 FSM	58.2	56.1	62.4	62.1	31.2	43.1	42.8	14.1	5.0
Pontiac.....	860, 870, 56-27	36.0	35.9	13.7	12.2	5.1	24.5	15.6	12.7	6.7 FSM	56.7	56.4	61.9	63.1	31.8	43.4	42.0	14.1	4.4
	Star Chief 56-28	36.0	35.9	13.7	12.2	5.1	24.5	13.6	12.5	6.7 FSM	56.7	56.4	61.9	63.1	31.8	43.4	42.0	14.1	4.4
STUDEBAKER-PACKARD CORP.																			
Clipper.....	Deluxe 5640, Custom 5660	36.2	34.5	13.8	13.4	5.1	22.1	11.1	5.4		57.0	55.5	62.8	62.0	31.4	43.3	43.8	14.3	5.0
Packard.....	5680	36.2	34.9	13.0	13.8	5.5	22.7	12.7	5.8		57.0	55.5	62.8	62.0	31.7	43.0	43.8	14.8	5.0
	Caribbean 5688	35.7	35.0	13.6	12.9	5.1	22.7	12.7	5.8		57.0	48.5	62.8	49.5	32.1	43.0	43.8	14.8	5.0
Studebaker.....	Commander 56-B	36.5	35.5	13.5	12.0	5.4	20.0	17.5	14.5	7.3 ERS	55.5	54.5		59.0	27.8	42.5	39.0	15.5	8.5
	Champion 56-G	36.5	35.5	13.5	12.0	5.4	18.5	18.0	14.5	6.5 ERS	55.5	54.5	59.5	59.0	27.8	42.5	39.0	15.5	8.5
	President 56-H	36.5	35.5	13.5	12.0	5.4	20.0	17.5	14.5	7.3 ERS	55.5	54.5	59.5	59.0	27.8	42.5	39.0	15.5	8.5
	Golden Hawk 56-J	35.6	34.0	10.8	12.0	4.3	20.0	19.0	14.5	6.2 RFP	55.0	53.0	59.5	58.0	26.6	43.8	36.0	13.8	8.5

GENERAL ENGINE DATA, PISTONS

[illegible]

Chilton's MOTOR AGE, APRIL, 1956

[illegible]

Chilton's MOTOR AGE, APRIL, 1956

ABBREVIATIONS

—When equipped with two carburetors.

—When equipped with sid. tank.

—When equipped with auto.

—Stem only; head, 2112.

—Or 8645 for stem only; head,

[illegible]

N—No or none.
NCA—Nickel chromium alloy steel.
NMC—Nitrogen treated manganese chromium nickel steel.
SCN—Silicon chromium or nickel chromium steel.
SCS—Siliconchromium steel. **Y**—Yes.

Bo-Both.
CNM-Chromium nickel molybdenum steel.
CNS-Chromium nickel steel.
CS-Chromium steel.
E-Exhaust.
HAS-High alloy steel.

at 1.148 with valve closed and 61.0
at 1.110 with valve open.
1—Outer spring only; inner spring, 26.0
at 1.148 with valve closed and 64.0
at 1.080 with valve open.

- Rich only; Eaton, 4.631.
- Stem only; head, Eaton, 81940, Rich, 82120.
- 373 when equipped with auto. trans.
- Thompson only; Eaton, head, silicone, stem, 8045.
- 2-Outer spring only; inner spring, 26.0

Outer spring only; inner spring, 28.0
at 1.530 with valve closed and 69.0
at 1.090 with valve open.

Outer spring only; inner spring, 26.5
at 1.530 with valve closed and 61.0
at 1.150 with valve open.

Rich only; Eaton, 8045.

ABBREVIATIONS

²—When equipped with two four-barrel carburetors.

³—When equipped with std. trans.

⁴—When equipped with auto. trans.

⁵—Stem only; head, 2112.

—Or 8645 for stem only; head, 2112.

6

VALVE TIMING, LUBRICATION, AND EXHAUST SYSTEMS

VALVE TIMING										LUBRICATION SYSTEM										EXHAUST SYSTEM							
Operating Tapet Clearance		Tapet Clearance for Timing		Timing Mark Location		Intake		Exhaust		Lubrication—Type					Oil Pressure		Type Oil Inlet		Oil Filter Type		Capacity of Crankcase, Less Filter—qt		Oil—Type		Muffler Type	Exhaust Pipe Diameter (in.)	Tail Pipe Diameter
Inlet	Exhaust	Inlet	Exhaust	Inlet	Exhaust	Opens (B.T.C.)	Closes (A.B.C.)	Opens (B.B.C.)	Closes (A.T.C.)	Main Bearings	Connecting Rods	Piston Pins	Crankshaft	Tapets	Timing Gear or Chain	Cylinder Walls	Normal Oil Pressure (S.A.E. No.)	Oil Pressure Range—Type	Type Oil Inlet	Oil Filter Type	Capacity of Crankcase, Less Filter—qt	Range in Oil Grade Recommended	Oil—Type	Oil—Type Recommended			
AMERICAN MOTORS CORP.	.010C	.015C	.010	.015	VD	VD	26.8	99.7	64.9	45.7	P	S	S	P	PF	DS	40-30	3-1	FI	FI	28-5W	ML1	RF	2	2	1 1/2	
	Hyd	Hyd	0	0	FI	FI	33.7	80.1	73.9	28.4	P	OM	OM	P	DS	DS	40-30	3-1	FI	FI	28-5W	MM3	SF	2 1/2	2 1/2	2	
	Hyd	Hyd	0	0	VD	VD	12.5	82.0	54.0	18.0	P	S	S	P	DS	DS	50-30	3-1	SI	SI	20-5W	ML1	SF	2	2	2	
	.016H	.016H	.023	.023	VD	VD	12.5	83.5	53.5	10.5	P	S	S	P	S	HR	60-30002	3-1	SI	SI	20-5W	MM3	SF	2 1/2	2 1/2	2	
	Hyd	Hyd	0	0	VD	VD	14.0	82.8	54.0	18.0	P	S	S	P	S	HR	45-28002	3-1	SI	SI	20-5W	ML1	SF	2	2	2	
	.012H	.016H	.015	.015	VD	VD	12.5	83.5	53.5	10.5	P	S	S	P	S	HR	50-30	3-1	SI	SI	20-5W	ML1	SF	2	2	2	
	Hyd	Hyd	VTS	VTS	VD	VD	5.0	67.0	39.8	25.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	15.0	57.0	49.0	15.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	15.0	57.0	49.0	15.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	15.0	57.0	49.0	15.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
CHRYSLER CORP.	.010H	.014H	.014	.014	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	VTS	VTS	VD	VD	12.0	44.0	50.0	6.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
FORD MOTOR CO.	.010H	.018H	.010	.018H	VD	VD	9.0	55.0	47.0	17.0	P	MS	MS	P	P	MS	60-15002	3-1	FI	FI	30-5W	MM3	SF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.018H	.018H	VD	VD	18.0	72.0	59.0	31.0	P	OM	OM	P	Gr	PS	30-20002	3-1	SI	SI	20-5W	ML1	RF	2	2	2	
	Hyd	Hyd	.018H	.018H	VD	VD	24.0	46.0	66.0	2.0	P	OM	OM	P	Gr	PS	30-20002	3-1	SI	SI	20-5W	ML1	RF	2	2	2	
	Hyd	Hyd	.018H	.018H	VD	VD	12.0	54.0	58.0	8.0	P	OM	OM	P	Gr	PS	45-20002	3-1	SI	SI	20-5W	ML1	RF	2	2	2	
	Hyd	Hyd	.018H	.018H	VD	VD	16.0	54.0	58.0	8.0	P	OM	OM	P	Gr	PS	45-20002	3-1	SI	SI	20-5W	ML1	RF	2	2	2	
	Hyd	Hyd	.018H	.018H	VD	VD	12.0	54.0	58.0	8.0	P	OM	OM	P	Gr	PS	45-20002	3-1	SI	SI	20-5W	ML1	RF	2	2	2	
	Hyd	Hyd	.018H	.018H	VD	VD	12.0	54.0	58.0	8.0	P	OM	OM	P	Gr	PS	45-20002	3-1	SI	SI	20-5W	ML1	RF	2	2	2	
	Hyd	Hyd	.018H	.018H	VD	VD	12.0	54.0	58.0	8.0	P	OM	OM	P	Gr	PS	45-20002	3-1	SI	SI	20-5W	ML1	RF	2	2	2	
	Hyd	Hyd	.018H	.018H	VD	VD	12.0	54.0	58.0	8.0	P	OM	OM	P	Gr	PS	45-20002	3-1	SI	SI	20-5W	ML1	RF	2	2	2	
	Hyd	Hyd	.018H	.018H	VD	VD	12.0	54.0	58.0	8.0	P	OM	OM	P	Gr	PS	45-20002	3-1	SI	SI	20-5W	ML1	RF	2	2	2	
GENERAL MOTORS CORP.	.00412	.00412	.00412	.00412	H8	H8	25.013	77.013	75.013	42.013	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.00412	.00412	H8	H8	30.0	82.0	78.0	44.0	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.00412	.00412	H8	H8	39.0	105.0	81.0	43.0	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.00412	.00412	H8	H8	39.0	105.0	81.0	43.0	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.00412	.00412	H8	H8	39.0	105.0	81.0	43.0	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.00412	.00412	H8	H8	39.0	105.0	81.0	43.0	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.00412	.00412	H8	H8	39.0	105.0	81.0	43.0	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.00412	.00412	H8	H8	39.0	105.0	81.0	43.0	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.00412	.00412	H8	H8	39.0	105.0	81.0	43.0	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
	Hyd	Hyd	.00412	.00412	H8	H8	39.0	105.0	81.0	43.0	P	S	S	P	P	Dr	35-16002	3-1	SI	SI	30-5W	MS	RF	2 1/2	2 1/2	2 1/2	
STUDEBAKER-PACKARD CORP.	.008	.018	.008	.018	VD	VD	26.5	83.5	66.5	23.5	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
STUDEBAKER-PACKARD CORP.	.008	.018	.008	.018	VD	VD	26.5	83.5	66.5	23.5	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hyd	.008	.018	VD	VD	31.7	92.5	69.5	27.0	P	S	S	P	P	JS	30-12002	3-1	SI	SI	20-5W	HD	RF	2	2	2	
	Hyd	Hy																									

ABBREVIATIONS

- ABBREVIATIONS**
1. When equipped with auto. trans.
 2. When equipped with two four-barrel carburetors.
 3. Also MM or MS depending on severity of service.
 4. Revolutions per minute.
 5. Or MS depending on severity of service.
 6. Stationary optional.
 7. M, MM or MS; branch, 2.
 8. 3 optional.
 9. Main optional.
 10. Main optional.
 11. Main optional.
 12. Main optional.
 13. Main optional.
 14. Main optional.
 15. Main optional.
 16. Main optional.
 17. Main optional.
 18. Main optional.
 19. Main optional.
 20. Main optional.
 21. Main optional.
 22. Main optional.
 23. Main optional.
 24. Main optional.
 25. Main optional.
 26. Main optional.
 27. Main optional.
 28. Main optional.
 29. Main optional.
 30. Main optional.
 31. Main optional.
 32. Main optional.
 33. Main optional.
 34. Main optional.
 35. Main optional.
 36. Main optional.
 37. Main optional.
 38. Main optional.
 39. Main optional.
 40. Main optional.
 41. Main optional.
 42. Main optional.
 43. Main optional.
 44. Main optional.
 45. Main optional.
 46. Main optional.
 47. Main optional.
 48. Main optional.
 49. Main optional.
 50. Main optional.
 51. Main optional.
 52. Main optional.
 53. Main optional.
 54. Main optional.
 55. Main optional.
 56. Main optional.
 57. Main optional.
 58. Main optional.
 59. Main optional.
 60. Main optional.
 61. Main optional.
 62. Main optional.
 63. Main optional.
 64. Main optional.
 65. Main optional.
 66. Main optional.
 67. Main optional.
 68. Main optional.
 69. Main optional.
 70. Main optional.
 71. Main optional.
 72. Main optional.
 73. Main optional.
 74. Main optional.
 75. Main optional.
 76. Main optional.
 77. Main optional.
 78. Main optional.
 79. Main optional.
 80. Main optional.
 81. Main optional.
 82. Main optional.
 83. Main optional.
 84. Main optional.
 85. Main optional.
 86. Main optional.
 87. Main optional.
 88. Main optional.
 89. Main optional.
 90. Main optional.
 91. Main optional.
 92. Main optional.
 93. Main optional.
 94. Main optional.
 95. Main optional.
 96. Main optional.
 97. Main optional.
 98. Main optional.
 99. Main optional.
 100. Main optional.

Ch

ton's MOTOR AGE, APRIL, 1956 65

• PASSENGER CARS •

DRIVE BELTS, AND ELECTRICAL SUPPLY SYSTEM

PASSENGER CAR MAKE AND MODEL	DRIVE BELTS			BATTERY			ELECTRICAL SUPPLY SYSTEM															
	Fan		Generator	Make	Model	S.A.E. Designation	Location	Terminal Grounded	Generator			Regulator										
	Angle of V (deg.)	Outside Length (in.)	Width (in.)						Angle of V (deg.)	Outside Length (deg.)	Width (in.)	Model	Type	Ratio (Gen to Cr/rev. (To 1))	Make	Model	Type	Closing Voltage at Generator R.P.M.	Reverse Current (amp.)	Regulated Voltage	Current	Minimum R.P.M. Required	Temperature (deg.)	Lead	Other
AMERICAN MOTORS CORP. Hudson 6-3560 6-3560 6-3560 Metropolitan 4-561, 562 Nash 6-5640 6-5660 6-5660 6-5660 Rambler 6-5610	1	38	38.8	38.8	38.8	38.8	UL	AL	GJC-7008-A	Sh	1.86	AL	VRX-6008-A	CV	13.0-13.8-13.25	8-9	14.6	30-40	2300	H	9-10 amp	N
	1	47	41.1	41.1	41.1	41.1	UL	AL	GJC-7008-A	Sh	1.86	AL	VRX-6008-A	CV	13.0-13.8-13.25	8-9	14.6	30-40	2300	H	9-10 amp	N
	1	36	56.1	56.1	56.1	56.1	UL	AL	GJC-7002-F	Sh	2.35	AL	VRX-6008-A	CV	13.0-13.8-13.25	8-9	14.6	30-40	2300	H	9-10 amp	N
	1	38	41.5	41.5	41.5	41.5	UL	DR	1103323	Sh	2.08	DR	1119122	CV	12.8-13.00	1-4	14.5	25	2775	70F	10 amp	N
	1	38	40.1	40.1	40.1	40.1	UL	AL	GJC-7007-A	Sh	2.08	AL	VRX-6008-A	CV	13.0-13.8-13.25	8-9	14.6	30-40	2300	70F	9-10 amp	N
CHRYSLER CORP. Chrysler 8-C-71 8-C-72, C-72-300 De Soto 8-523, S-24 Dodge 8-D-52 8-D-52 8-D-52-1 8-D-52-2, D-53-3 Imperial 8-523-1 8-523-2 Plymouth 8-P-28 8-P-28 8-P-28-3 Fury	22	38	39.0	39.0	39.0	39.0	UL	AL	GJC-7002	SW	2.10	AL	VRX-6201-A	CV	13.0-13.8-13.00	0-6	14.3-14.9	30-40	1300	70F	7 amp	RO
	25	38	39.0	39.0	39.0	39.0	UL	AL	GJC-7002	SW	2.10	AL	VRX-6201-A	CV	13.0-13.8-13.00	0-6	14.3-14.9	30-40	1300	70F	7 amp	RO
	18	38	39.0	39.0	39.0	39.0	UL	AL	GJC-7001	SW	1.96	AL	VRX-6201-A	CV	13.0-13.8-13.00	8-9	14.3-14.9	30-40	1300	70F	7 amp	RO
	18	38	39.0	39.0	39.0	39.0	UL	AL	GJC-7001	SW	1.96	AL	VRX-6201-A	CV	13.0-13.8-13.00	8-9	14.3-14.9	30-40	1300	70F	7 amp	RO
	18	38	39.0	39.0	39.0	39.0	UL	AL	GGA-6002	SW	2.10	AL	VAT-6201-A	CV	13.0-13.8-13.00	8-9	14.3-14.9	30-40	1300	70F	7 amp	RO
FORD MOTOR CO. Continental Ford 8-60-A 8-60-A 8-60-A Lincoln 8-73-A, 73-B Mercury 8-73-A, 73-B	2	36	55.0	55.0	55.0	55.0	UL	AL	GJC-7002	SW	2.10	AL	VRX-6201-A	CV	13.0-13.8-13.00	0-6	14.3-14.9	30-40	1300	70F	7 amp	RO
	2	36	55.0	55.0	55.0	55.0	UL	AL	GJC-7002	SW	2.10	AL	VRX-6201-A	CV	13.0-13.8-13.00	0-6	14.3-14.9	30-40	1300	70F	7 amp	RO
	2	36	55.0	55.0	55.0	55.0	UL	AL	GJC-7002	SW	2.10	AL	VRX-6201-A	CV	13.0-13.8-13.00	0-6	14.3-14.9	30-40	1300	70F	7 amp	RO
	2	36	55.0	55.0	55.0	55.0	UL	AL	GJC-7002	SW	2.10	AL	VRX-6201-A	CV	13.0-13.8-13.00	0-6	14.3-14.9	30-40	1300	70F	7 amp	RO
	2	36	55.0	55.0	55.0	55.0	UL	AL	GJC-7002	SW	2.10	AL	VRX-6201-A	CV	13.0-13.8-13.00	0-6	14.3-14.9	30-40	1300	70F	7 amp	RO
GENERAL MOTORS CORP. Buick 8-40, 80, 80, 70 Cadillac 8-40, 80, 80, 70 Chevrolet 8-1500, 2100, 2400 8-1500, 2100, 2400 Oldsmobile 8-88, 98 Pontiac 8-56-27, 56-28	1	40	52.6	52.6	52.6	52.6	UL	DR	FBG-10000-B	Sh	2.00	F-A	FAP10505-B-C	TC	12.0-12.8	2-6	14.6-15.4	28-32	3000	75F	5 amp	N
	1	40	52.6	52.6	52.6	52.6	UL	DR	FBG-10000-B	Sh	2.00	F-A	FAP10505-B-C	TC	12.0-12.8	2-6	14.6-15.4	28-32	3000	75F	5 amp	N
	1	40	52.6	52.6	52.6	52.6	UL	DR	FBG-10000-B	Sh	2.00	F-A	FAP10505-B-C	TC	12.0-12.8	2-6	14.6-15.4	28-32	3000	75F	5 amp	N
	1	40	52.6	52.6	52.6	52.6	UL	DR	FBG-10000-B	Sh	2.00	F-A	FAP10505-B-C	TC	12.0-12.8	2-6	14.6-15.4	28-32	3000	75F	5 amp	N
	1	40	52.6	52.6	52.6	52.6	UL	DR	FBG-10000-B	Sh	2.00	F-A	FAP10505-B-C	TC	12.0-12.8	2-6	14.6-15.4	28-32	3000	75F	5 amp	N
TUDEBAKER-PACKARD CORP. Clipper 8-5640, 5660 Packard 8-560, 560 Packard 8-560, 560 Studebaker 8-56-B, 56-H 8-56-G 8-56-J	1	36	56.7	56.7	56.7	56.7	UL	AL	GJC-7002-F	Sh	2.25	AL	VRX-6008-A	CV	13.0-13.8	1-4	14.2-14.9	30	2300	70F	10 amp	FR
	1	36	56.7	56.7	56.7	56.7	UL	AL	GJC-7002-F	Sh	2.25	AL	VRX-6008-A	CV	13.0-13.8	1-4	14.2-14.9	30	2300	70F	10 amp	FR
	1	36	56.7	56.7	56.7	56.7	UL	AL	GJC-7002-F	Sh	2.25	AL	VRX-6008-A	CV	13.0-13.8	1-4	14.2-14.9	30	2300	70F	10 amp	FR
	1	36	56.7	56.7	56.7	56.7	UL	AL	GJC-7002-F	Sh	2.25	AL	VRX-6008-A	CV	13.0-13.8	1-4	14.2-14.9	30	2300	70F	10 amp	FR
	1	36	56.7	56.7	56.7	56.7	UL	AL	GJC-7002-F	Sh	2.25	AL	VRX-6008-A	CV	13.0-13.8	1-4	14.2-14.9	30	2300	70F	10 amp	FR

Abbreviations:
 *—Same belt is used to drive both fan and generator.
 †—Two belts with air conditioning.
 ‡—Three with power steering and air conditioning; four with power steering only.
 1—Auto-Lite only; Willard, HO-11-50; warm climate option on cars with air conditioning; Auto-Lite, 11-MS-45; Willard, MO-11-45.
 2—Auto-Lite only; Willard, HO-11-50; warm climate option; Auto-Lite, 11-MS-45; Willard, MO-11-45 (not on cars with air conditioning).
 3—Three with power steering; four with power steering and air conditioning.
 4—Auto-Lite only; Willard, HO-11-50; warm climate option; Auto-Lite, 11-MS-45; Willard, MO-11-45 (not on cars with air conditioning).
 5—Three with air conditioning.
 6—Four with air conditioning.
 7—77.3 with air conditioning.
 8—Two with power steering only; three with power steering and air conditioning.
 9—37.3 with air conditioning.
 10—Auto-Lite only; Willard, HO-11-50; warm climate option on cars with air conditioning; Auto-Lite, 11-MS-45; Willard, MO-11-45.
 11—Auto-Lite only; Willard, HO-11-50; warm climate option; Auto-Lite, 11-MS-45; Willard, MO-11-45 (not on cars with air conditioning).
 12—Three with air conditioning.
 13—60.0 for fan belt; 35.5 with air conditioning.
 14—75.0 with fan belt; 53.0 with air conditioning.
 15—46.5 for fan belt; 53.0 with air conditioning.
 16—Two for fan belt; 33.4 with power steering.
 17—39.6 for fan belt; 33.4 with power steering.
 18—Three with power steering; four with power steering and air conditioning.
 19—46.2 for fan belt; 37.4 with power steering.
 20—1191012 with air conditioning.
 21—1191012 with air conditioning.
 22—27-30 standard; 32-35 with air conditioning.
 23—2900 with air conditioning.
 24—Amperes.
 25—Electric Auto-Lite Co.
 26—Auto-Lite or Willard.
 27—Cycle regulator.
 28—Current and voltage control.
 29—Delco-Remy Div.
 30—Degrees Fahrenheit.
 31—Two pole.
 32—Ford or American Bosch.
 33—Ford Motor Co.
 34—Fixed resistance method.
 35—Hot.
 36—Ignition and instrument load only.
 37—No negative.
 38—Operating temperature.
 39—Rated output.
 40—Shunt.
 41—Shunt wound.
 42—Three coil.
 43—Two pole.
 44—Under hood, front left side.
 45—Under hood, front right side.
 46—Under hood, left side.
 47—Under hood, rear center.
 48—Under hood, rear left side.
 49—Under hood, rear right side.
 50—Under hood, rear seat, right side.
 51—Various.
 52—Voltage check.
 53—Willard.

STARTING AND IGNITION SYSTEMS

STARTING SYSTEM										IGNITION SYSTEM																					
MOTOR					CONTROL					DRIVE					COIL					DISTRIBUTOR											
PASSENGER CAR MAKE AND MODEL	Make	Model	Engine Cranking Speed (RPM)	Test Conditions	Lock Test			No Load Test	RPM (min.)	Switch	Starting Procedure	Engagement—Type	Pinion Meshes	Pinion Teeth	Flywheel Teeth	Make	Model	Amps.	Engine Stopped	Engine Liding	Make	Model	Start (RPM)	Maximum (RPM)	Vacuum Advance (in. Hg.)	Vacuum Advance Start (in. Hg.)	Spark Advance Data (at distributor shaft)	Breaker Gap (in.)	Cam Angle (deg.)	Breaker Arm Tension (oz.)	
					Amps	Volts	Torque (lb. ft.)																								
AMERICAN MOTORS CORP.	Hudson	MBG-4101	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
	Hudson	MDF-5001	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
	Hudson	MDF-5008	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
	Hudson	MDF-5001	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
	Hudson	MDF-5001	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
	Hudson	MDF-5001	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
	Hudson	MDF-5001	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
	Hudson	MDF-5001	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
	Hudson	MDF-5001	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
	Hudson	MDF-5001	165	RT	550	5.0	15.5	120	12.0	4800	Sol	Tik	Ben	R	9	182	375	F-E	FAC12029A	4.50	2.50	Heol	FDR121278	None	None	1-25	13.3°-1.9	0.15	27	19	
GENERAL MOTORS CORP.	Buick	1107648	160	OT	470	6.4	10.3	95	10.1	3500	Sol	Dap	SOG	F	9	180	573	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	NR	21	19
	Cadillac	8-40, 50, 60, 70	60	OT	395	3.5	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Cadillac	8-40, 62, 75	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Cadillac	8-1500, 2100, 2400	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Cadillac	8-1500, 2100, 2400	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Cadillac	8-1500, 2100, 2400	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Cadillac	8-1500, 2100, 2400	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Cadillac	8-1500, 2100, 2400	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Cadillac	8-1500, 2100, 2400	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Cadillac	8-1500, 2100, 2400	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
STUDEBAKER-PACKARD CORP.	Oldsmobile	8-88, 98	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Pontiac	8-56-27, 56-28	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Pontiac	8-56-27, 56-28	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Pontiac	8-56-27, 56-28	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Pontiac	8-56-27, 56-28	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Pontiac	8-56-27, 56-28	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Pontiac	8-56-27, 56-28	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Pontiac	8-56-27, 56-28	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Pontiac	8-56-27, 56-28	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
	Pontiac	8-56-27, 56-28	DR	OT	415	5.8	12.0	85	10.4	3900	Sol	Tik	SSO	F	9	176	500	DR	111508118	4.50	2.50	DR	1110861	8°-375	12.3°-1750	0°-7.50	10.5°-12.0	0.15	33	21	19
CHRYSLER CORP.	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Chrysler	8-60, 71	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
FORD MOTOR CO.	Continental	8-40, 60	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Continental	8-40, 60	DR	OT	395	6.1	14.5	75	11.0	4400	Sol	Tik	SAS	F	9	182	375	AL	CAD-4004	3.50	1.20	DR	1110862	0°-400	10.0°-3600	0°-5.00	6.0°-13.5	0.16	30	21	19
	Continental	8-40, 60	DR	OT	395</																										

• PASSENGER CARS •

IGNITION TIMING, SPARK PLUGS, AND CLUTCHES

PASSENGER CAR MAKE AND MODEL	IGNITION TIMING		SPARK PLUGS			CABLE		CLUTCH (PEDAL OPERATED)																			
	C/s deg. @ RPM	Mark Location	Make and Model	Thread (mm)		Gap (in. lb.)	Conductor Type	Insulation Type	Spark Plug Protector	Suppression Type	Make	Type	Fluid Coupling	Semi-centrifugal	Type Pressure	Total Plate Pressure	No. of Driven Discs	Facing					Engagement Cushioning	Release Bearing	Torsional Dampening		
				Make and Model	Thread (mm)													Gap (in. lb.)	Conductor Type	Insulation Type	Spark Plug Protector	Inside Diam. (in.)			Outside Diam. (in.)	Effective Area (Sq. in.)	Thickness (in.)
AMERICAN MOTORS CORP.	6-35640 6-35660 6-35680 5B	TC-550 Fly TC-550	Ch-H-10 Ch-H-11 Ch-N-182	14 30 14 25 14 30	.032 .030 .035 ³ CT	SC	Ne Ne Ne	Hy Hy Hy	DC DC R	HT HT HT	BB BB N	DP DP DP	N N N	N N N	Co Co Co	1242 1734 1300	1 1 1	MWA MWA MWA	6.0 6.5 6.5	9.1 10.3 8.0	71.9 98.7 135	.285 .125 .135	1 2 2	WS WS Cfs	Ba Ba Ba	S P P	SW SS SS
	4-581, 582 6-5660 6-5680 4E	TC Fly TC	AL-7J AL-7J Ch-N-182	14 30 14 30 14 30	.030 .030 .035 ³ CT	SC	Ne Ne Ne	Hy Hy Hy	HT HT R	HT HT HT	BB BB BB	DP DP DP	N N N	N N N	Co Co Co	1300 1395 1395	1 1 1	MWA MWA MWA	6.0 6.0 6.0	9.1 10.0 10.0	72.2 80.1 80.1	.135 .125 .135	2 2 2	Cfs Cfs Cfs	Ba Ba Ba	P P P	SS SS SS
	6-5610 TC	TC	Ch-N-182	14 30	.030 SC	SC	Ne	Hy	HT	HT	BB	DP	N	N	Co	1395	1	MWA	6.0	10.0	100.5	.125	2	Cfs	Ba	S	CS
	8-C-71 8-C-72 8-C-73 8-C-74 8-C-75 8-C-76 8-C-77 8-C-78 8-C-79 8-C-80 8-D-63-2 8-D-63-3 8-D-63-4 8-D-63-5 8-D-63-6 8-D-63-7 8-D-63-8 8-D-63-9 8-D-63-10 8-D-63-11 8-D-63-12 8-D-63-13 8-D-63-14 8-D-63-15 8-D-63-16 8-D-63-17 8-D-63-18 8-D-63-19 8-D-63-20 8-D-63-21 8-D-63-22 8-D-63-23 8-D-63-24 8-D-63-25 8-D-63-26 8-D-63-27 8-D-63-28 8-D-63-29 8-D-63-30 8-D-63-31 8-D-63-32 8-D-63-33 8-D-63-34 8-D-63-35 8-D-63-36 8-D-63-37 8-D-63-38 8-D-63-39 8-D-63-40 8-D-63-41 8-D-63-42 8-D-63-43 8-D-63-44 8-D-63-45 8-D-63-46 8-D-63-47 8-D-63-48 8-D-63-49 8-D-63-50 8-D-63-51 8-D-63-52 8-D-63-53 8-D-63-54 8-D-63-55 8-D-63-56 8-D-63-57 8-D-63-58 8-D-63-59 8-D-63-60 8-D-63-61 8-D-63-62 8-D-63-63 8-D-63-64 8-D-63-65 8-D-63-66 8-D-63-67 8-D-63-68 8-D-63-69 8-D-63-70 8-D-63-71 8-D-63-72 8-D-63-73 8-D-63-74 8-D-63-75 8-D-63-76 8-D-63-77 8-D-63-78 8-D-63-79 8-D-63-80 8-D-63-81 8-D-63-82 8-D-63-83 8-D-63-84 8-D-63-85 8-D-63-86 8-D-63-87 8-D-63-88 8-D-63-89 8-D-63-90 8-D-63-91 8-D-63-92 8-D-63-93 8-D-63-94 8-D-63-95 8-D-63-96 8-D-63-97 8-D-63-98 8-D-63-99 8-D-63-100	284 4B 3B 3B 3B 2B 																									

ABBREVIATIONS
 1-25 with aluminum head.
 2-Late models only; early models, Ch-N-8.
 3-Late models only; early models, 085.
 4-4B with power package.
 5-Vibration damper with power package.
 6-Borg & Beck only; Auburn, 1412.
 7-P-28-2 and P-28-3 only; P-28-1 on fan drive pulley.
 8-6B with auto. trans.
 9-Coil springs with two four-barrel carburetors.
 10-Coil springs with two four-barrel carburetors.
 11-1755 with two four-barrel carburetors.
 12-6.5 with two four-barrel carburetors.
 13-10.5 with two four-barrel carburetors.
 14-106.8 with two four-barrel carburetors.
 15-106.8 with two four-barrel carburetors.
 16-106.8 with two four-barrel carburetors.
 17-106.8 with two four-barrel carburetors.
 18-106.8 with two four-barrel carburetors.
 19-106.8 with two four-barrel carburetors.
 20-106.8 with two four-barrel carburetors.
 21-106.8 with two four-barrel carburetors.
 22-106.8 with two four-barrel carburetors.
 23-106.8 with two four-barrel carburetors.
 24-106.8 with two four-barrel carburetors.
 25-106.8 with two four-barrel carburetors.
 26-106.8 with two four-barrel carburetors.
 27-106.8 with two four-barrel carburetors.
 28-106.8 with two four-barrel carburetors.
 29-106.8 with two four-barrel carburetors.
 30-106.8 with two four-barrel carburetors.
 31-106.8 with two four-barrel carburetors.
 32-106.8 with two four-barrel carburetors.
 33-106.8 with two four-barrel carburetors.
 34-106.8 with two four-barrel carburetors.
 35-106.8 with two four-barrel carburetors.
 36-106.8 with two four-barrel carburetors.
 37-106.8 with two four-barrel carburetors.
 38-106.8 with two four-barrel carburetors.
 39-106.8 with two four-barrel carburetors.
 40-106.8 with two four-barrel carburetors.
 41-106.8 with two four-barrel carburetors.
 42-106.8 with two four-barrel carburetors.
 43-106.8 with two four-barrel carburetors.
 44-106.8 with two four-barrel carburetors.
 45-106.8 with two four-barrel carburetors.
 46-106.8 with two four-barrel carburetors.
 47-106.8 with two four-barrel carburetors.
 48-106.8 with two four-barrel carburetors.
 49-106.8 with two four-barrel carburetors.
 50-106.8 with two four-barrel carburetors.
 51-106.8 with two four-barrel carburetors.
 52-106.8 with two four-barrel carburetors.
 53-106.8 with two four-barrel carburetors.
 54-106.8 with two four-barrel carburetors.
 55-106.8 with two four-barrel carburetors.
 56-106.8 with two four-barrel carburetors.
 57-106.8 with two four-barrel carburetors.
 58-106.8 with two four-barrel carburetors.
 59-106.8 with two four-barrel carburetors.
 60-106.8 with two four-barrel carburetors.
 61-106.8 with two four-barrel carburetors.
 62-106.8 with two four-barrel carburetors.
 63-106.8 with two four-barrel carburetors.
 64-106.8 with two four-barrel carburetors.
 65-106.8 with two four-barrel carburetors.
 66-106.8 with two four-barrel carburetors.
 67-106.8 with two four-barrel carburetors.
 68-106.8 with two four-barrel carburetors.
 69-106.8 with two four-barrel carburetors.
 70-106.8 with two four-barrel carburetors.
 71-106.8 with two four-barrel carburetors.
 72-106.8 with two four-barrel carburetors.
 73-106.8 with two four-barrel carburetors.
 74-106.8 with two four-barrel carburetors.
 75-1

• PASSENGER CARS •

LAMP BULBS, FUSES AND CIRCUIT BREAKERS

PASSENGER CAR MAKE AND MODEL	LAMP BULBS (Trade Number)										FUSES AND CIRCUIT BREAKERS (Trade Number)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	Headlamp	Headlamp Beam Indicator	Parking Light	Tail Light	Stop Light	Direction Indicator			License Plate Light	Instrument Light	Ignition Lock Light	Dome Light	Clock Light	Courtesy Light	Trunk Compartment Light																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
						Front	Rear	Tail Tail																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
AMERICAN MOTORS CORP. Hudson . . . 6-35640, 35660, 8-35680 Metropolitan . . . 4-561, 562 Nash 6-5640, 5660, 8-5680 Rambler 8-5610	5400	57	1034	1034	(1)	(2)	(2)	57	67	57	N	89	(4)	(5)	N	12CB	(6)	12CB	(2)	30CB	(2)	(3)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)

1—On tail light.
2—On parking light.
3—On stop light.
4—On instrument light.
5—On dome light.
6—On headlamp.
7—On map light.
8—On head lamp beam indicator.
9—Electric wind only; Motochron, not fused.
10—On glove compartment light.
11—Custom cars use 90 bulb.
IP—Internally protected.
MNF—Motochron, not fused.
N—No or none.
CB—Circuit breaker.

• PASSENGER CARS •

TRANSMISSIONS—Conventional and Conventional with Overdrive

PASSENGER CAR MAKE AND MODEL	TYPE		CONVENTIONAL TRANSMISSION											OVERDRIVE																
	Conventional	Conventional with O.D.	Automatic	No. of Forward Speeds	Ratios			Constant Mesh Gears in 2nd	Spur Gear Used in	Helical Gears Used in	Synchronous Meshing in 2nd and 3rd Gears	Capacity (pt.)	Lubricant			Type	If Planetary— No. of Planets	Manual Lockout	Downshift Accelerator Control	Minimum Cut-in Speed (mph)	Gear Ratio (to—1)	Capacity (pt.)	Separate Filter	Lubricant						
					First	Second	Third						Reverse	Type Recommended	SAE Viscosity Number															
															Summer									Winter	Extreme Cold	Type Recommended	Summer	Winter	Extreme Cold	
AMERICAN MOTORS CORP. Hudson 6-35640 6-35660 6-35680 4-561, 562 Metropolitan 6-5640 Nash 6-5640 6-5680 6-5680 Rambler 6-5610	Std	Opt	Opt	3	2.61	1.63	1.00	3.54	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	P	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
	Std	Opt	Opt	3	2.57	1.55	1.00	3.49	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	NA	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
	Std	Opt	Opt	3	2.61	1.63	1.00	3.54	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	P	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
	Std	Opt	Opt	3	2.57	1.55	1.00	3.49	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	P	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
	Std	Opt	Opt	3	2.61	1.63	1.00	3.54	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	d	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
	Std	Opt	Opt	3	2.57	1.55	1.00	3.49	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	P	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
	Std	Opt	Opt	3	2.61	1.63	1.00	3.54	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	P	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
	Std	Opt	Opt	3	2.57	1.55	1.00	3.49	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	P	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
	Std	Opt	Opt	3	2.61	1.63	1.00	3.54	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	P	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
	Std	Opt	Opt	3	2.57	1.55	1.00	3.49	Y	N	1.2R	Y	Y	2 1/4	SM	80	80	80	P	3	Y	Y	25	.700	1 1/4	N	SM	90	80	80
CHRYSLER CORP. Chrysler 8-C-71 8-C-72 8-C-72-300 De Soto 6-562 Dodge 8-D-62 8-D-63 Imperial 8-C-70, C-73 Plymouth 6-P-28 8-P-28—All Models	Std	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	FG	80	80	80	NA	3	Y	Y	28	.700	3/4	N	EO	10W	10W	10W
	NA	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	FG	80	80	80	NA	3	Y	Y	28	.700	3/4	N	EO	10W	10W	10W
	NA	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	FG	80	80	80	P	3	Y	Y	28	.700	3/4	N	EO	10W	10W	10W
	NA	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	GL	80	80	80	P	3	Y	Y	28	.700	3/4	N	GL	80	80	80
	NA	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	GL	80	80	80	P	3	Y	Y	28	.700	3/4	N	GL	80	80	80
	NA	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	GL	80	80	80	NA	3	Y	Y	28	.700	3/4	N	GL	80	80	80
	NA	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	GL	80	80	80	P	3	Y	Y	28	.700	3/4	N	GL	80	80	80
	NA	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	GL	80	80	80	P	3	Y	Y	28	.700	3/4	N	GL	80	80	80
	NA	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	GL	80	80	80	P	3	Y	Y	28	.700	3/4	N	GL	80	80	80
	NA	NA	Opt	3	2.50	1.68	1.00	3.20	Y	N	AS	Y	Y	2 1/4	GL	80	80	80	P	3	Y	Y	28	.700	3/4	N	GL	80	80	80
FORD MOTOR CO. Continental 8-60A 8-272 cu. in. 8-282 cu. in. 8-40A, 40B 8-73A, 73B Lincoln Mercury 8-73A, 73B	NA	NA	Std	NA	2.78	1.612	1.00	3.383	Y	N	AS	Y	Y	3	ME	80	80	80	NA	3	Y	Y	27	.700	1 1/4	N	ME	80	80	80
	Std	Opt	Opt	3	2.78	1.612	1.00	3.383	Y	N	AS	Y	Y	3	ME	80	80	80	P	3	Y	Y	27	.700	1 1/4	N	ME	80	80	80
	Std	Opt	Opt	3	2.78	1.612	1.00	3.383	Y	N	AS	Y	Y	3	ME	80	80	80	P	3	Y	Y	27	.700	1 1/4	N	ME	80	80	80
	Std	Opt	Opt	3	2.32	1.486	1.00	2.82	Y	N	AS	Y	Y	3	MP	80	80	80	P	3	Y	Y	27	.720	1 1/4	N	MP	80	80	80
	Std	Opt	Opt	3	2.32	1.486	1.00	2.82	Y	N	AS	Y	Y	3	MP	80	80	80	P	3	Y	Y	27	.720	1 1/4	N	MP	80	80	80
	Std	Opt	Opt	3	2.32	1.486	1.00	2.82	Y	N	AS	Y	Y	3	MP	80	80	80	P	3	Y	Y	27	.720	1 1/4	N	MP	80	80	80
	Std	Opt	Opt	3	2.48	1.59	1.00	3.15	Y	N	AS	Y	Y	3 1/4	ME	80	80	80	P	4	Y	Y	28	.720	1 1/4	N	ME	80	80	80
	Std	Opt	Opt	3	2.48	1.59	1.00	3.15	Y	N	AS	Y	Y	3 1/4	ME	80	80	80	P	4	Y	Y	28	.720	1 1/4	N	ME	80	80	80
	Std	Opt	Opt	3	2.39	1.53	1.00	2.53	Y	N	AS	Y	Y	2 1/2	MP	80	80	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	90
	Std	Opt	Opt	3	2.39	1.53	1.00	2.53	Y	N	AS	Y	Y	2 1/2	MP	80	80	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	90
GENERAL MOTORS CORP. Buick 8-40 8-50, 50, 70 Cadillac 8-60, 62, 75 Chevrolet 6-1500, 2100, 2400 8-1500, 2100, 2400 Oldsmobile 8-2934 8-58 8-58 Pontiac 8-58-27, 58-28	Std	NA	Opt	3	2.84	1.68	1.00	2.84	Y	N	AS	Y	Y	2	MO	90	90	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	80
	Std	NA	Opt	3	2.84	1.68	1.00	2.84	Y	N	AS	Y	Y	2	MO	90	90	80	P	3	Y	Y	29	.700	1	N	MO	90	90	80
	Std	NA	Opt	3	2.84	1.68	1.00	2.84	Y	N	AS	Y	Y	2	MO	90	90	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	80
	Std	NA	Opt	3	2.84	1.68	1.00	2.84	Y	N	AS	Y	Y	2	MO	90	90	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	80
	Std	NA	Opt	3	2.38	1.53	1.00	2.53	Y	N	AS	Y	Y	2 1/2	MP	80	80	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	80
	Std	NA	Opt	3	2.38	1.53	1.00	2.53	Y	N	AS	Y	Y	2 1/2	MP	80	80	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	80
	Std	NA	Opt	3	2.38	1.53	1.00	2.53	Y	N	AS	Y	Y	2 1/2	MP	80	80	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	80
	Std	NA	Opt	3	2.38	1.53	1.00	2.53	Y	N	AS	Y	Y	2 1/2	MP	80	80	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	80
	Std	NA	Opt	3	2.38	1.53	1.00	2.53	Y	N	AS	Y	Y	2 1/2	MP	80	80	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	80
	Std	NA	Opt	3	2.38	1.53	1.00	2.53	Y	N	AS	Y	Y	2 1/2	MP	80	80	80	NA	3	Y	Y	29	.700	1	N	MO	90	90	80
STUDEBAKER-PACKARD CORP. Clipper 8-5640, 5660 8-5680 8-5688 Studebaker 8-568 8-568 8-561	Opt	Opt	Opt	3	2.49	1.59	1.00	3.15	Y	N	1.2R	Y	Y	3 1/4	MP	90	90	80	P	4	Y	Y	22	.722	1 1/4	Y	MP	90	90	80
	Opt	Opt	Opt	3	2.49	1.59	1.00	3.15	Y	N	1.2R	Y	Y	3 1/4	MP	90	90	80	P	4	Y	Y	22	.722	1 1/4	Y	MP	90	90	80
	NA	NA	Opt	3	2.49	1.59	1.00	3.15	Y	N	1.2R	Y	Y	3 1/4	MP	90	90	80	NA	3	Y	Y	22	.722	1 1/4	Y	MP	90	90	80
	NA	NA	Opt	3	2.49	1.59	1.00	3.15	Y	N	1.2R	Y	Y	3 1/4	MP	90	90	80	NA	3	Y	Y	22	.722	1 1/4	Y	MP	90	90	80
	Std	Opt	Opt	3	2.81	1.65	1.00	3.48	Y	N	AS	Y	Y	2 1/2	MO	90	90	90	P	3	Y	Y	25	.700	1 1/4	N	MO	90	90	90
	Std	Opt	Opt	3	2.81	1.65	1.00	3.48	Y	N	AS	Y	Y	2 1/2	MO	90	90	90	P	3	Y	Y	25	.700	1 1/4	N	MO	90	90	90
	Std	Opt	Opt	3	2.87	1.63	1.00	3.48	Y	N	AS	Y	Y	2 1/2	MO	90	90	90	P	3	Y	Y	25	.700	1 1/4	N	MO	90	90	90
	Std	Opt	Opt	3	2.87	1.63	1.00	3.48	Y	N	AS	Y	Y	2 1/2	MO	90	90	90	P	3	Y	Y	25	.700	1 1/4	N	MO	90	90	90
	Std	Opt	Opt	3	2.87	1.63	1.00	3.48	Y	N	AS	Y	Y	2 1/2	MO	90	90	90	P	3	Y	Y	25	.700	1 1/4	N	MO	90	90	90
	Std	Opt	Opt	3	2.49	1.59	1.00	3.15	Y	N	AS	Y	Y	1 1/4	MO	90	90	90	P	4	Y	Y	22	.722	1 1/4	Y	MO	90	90	90

1. 1.55 with overdrive.
 2. 1.43 with overdrive.
 3. 1.49 with overdrive.
 4. 2.30 with overdrive.
 5. 2.37 with overdrive.
 6. 2.37 with overdrive.
 7. 2.37 with overdrive.
 8. 2.37 with overdrive.
 9. 2.37 with overdrive.
 10. 1.31 with two four-barrel carburetors.
 11. 2.49 on Classic with overdrive.
 12. 1.59 on Classic with overdrive.
 13. 3.15 on Classic with overdrive.
 14. 3.15 on Classic with overdrive.
 15. 3.15 on Classic with overdrive.
 16. 2.22 on Classic with overdrive.
 17. 2.22 on Classic with overdrive.
 18. 2.22 on Classic with overdrive.
 19. 2.22 on Classic with overdrive.
 20. 2.22 on Classic with overdrive.
 21. 2.22 on Classic with overdrive.
 22. 2.22 on Classic with overdrive.
 23. 2.22 on Classic with overdrive.
 24. 2.22 on Classic with overdrive.
 25. 2.22 on Classic with overdrive.
 26. 2.22 on Classic with overdrive.
 27. 2.22 on Classic with overdrive.
 28. 2.22 on Classic with overdrive.
 29. 2.22 on Classic with overdrive.
 30. 2.22 on Classic with overdrive.
 31. 2.22 on Classic with overdrive.
 32. 2.22 on Classic with overdrive.
 33. 2.22 on Classic with overdrive.
 34. 2.22 on Classic with overdrive.
 35. 2.22 on Classic with overdrive.
 36. 2.22 on Classic with overdrive.
 37. 2.22 on Classic with overdrive.
 38. 2.22 on Classic with overdrive.
 39. 2.22 on Classic with overdrive.
 40. 2.22 on Classic with overdrive.
 41. 2.22 on Classic with overdrive.
 42. 2.22 on Classic with overdrive.
 43. 2.22 on Classic with overdrive.
 44. 2.22 on Classic with overdrive.
 45. 2.22 on Classic with overdrive.
 46. 2.22 on Classic with overdrive.
 47. 2.22 on Classic with overdrive.
 48. 2.22 on Classic with overdrive.
 49. 2.22 on Classic with overdrive.
 50. 2.22 on Classic with overdrive.
 51. 2.22 on Classic with overdrive.
 52. 2.22 on Classic with overdrive.
 53. 2.22 on Classic with overdrive.
 54. 2.22 on Classic with overdrive.
 55. 2.22 on Classic with overdrive.
 56. 2.22 on Classic with overdrive.
 57. 2.22 on Classic with overdrive.
 58. 2.22 on Classic with overdrive.
 59. 2.22 on Classic with overdrive.
 60. 2.22 on Classic with overdrive.
 61. 2.22 on Classic with overdrive.
 62. 2.22 on Classic with overdrive.
 63. 2.22 on Classic with overdrive.
 64. 2.22 on Classic with overdrive.
 65. 2.22 on Classic with overdrive.
 66. 2.22 on Classic with overdrive.
 67. 2.22 on Classic with overdrive.
 68. 2.22 on Classic with overdrive.
 69. 2.22 on Classic with overdrive.
 70. 2.22 on Classic with overdrive.
 71. 2.22 on Classic with overdrive.
 72. 2.22 on Classic with overdrive.
 73. 2.22 on Classic with overdrive.
 74. 2.22 on Classic with overdrive.
 75. 2.22 on Classic with overdrive.
 76. 2.22 on Classic with overdrive.
 77. 2.22 on Classic with overdrive.
 78. 2.22 on Classic with overdrive.
 79. 2.22 on Classic with overdrive.
 80. 2.22 on Classic with overdrive.
 81. 2.22 on Classic with overdrive.
 82. 2.22 on Classic with overdrive.
 83. 2.22 on Classic with overdrive.
 84. 2.22 on Classic with overdrive.
 85. 2.22 on Classic with overdrive.
 86. 2.22 on Classic with overdrive.
 87. 2.22 on Classic with overdrive.
 88. 2.22 on Classic with overdrive.
 89. 2.22 on Classic with overdrive.
 90. 2.22 on Classic with overdrive.
 91. 2.22 on Classic with overdrive.
 92. 2.22 on Classic with overdrive.
 93. 2.22 on Classic with overdrive.
 94. 2.22 on Classic with overdrive.
 95. 2.22 on Classic with overdrive.
 96. 2.22 on Classic with overdrive.
 97. 2.22 on Classic with overdrive.
 98. 2.22 on Classic with overdrive.
 99. 2.22 on Classic with overdrive.
 100. 2.22 on Classic with overdrive.

Opt—Optional.
 P—Planetary.
 ME—Mild extreme pressure.
 MO—Mineral oil.
 MP—Multi-purpose.
 N—Not available.
 NA—Not available.
 Y—Yes.

11—2.49 on Classic with overdrive.
 12—1.59 on Classic with overdrive.
 13—3.15 on Classic with overdrive.
 14—3.15 on Classic with overdrive.
 15—3.15 on Classic with overdrive.
 16—2.22 on Classic with overdrive.
 17—2.22 on Classic with overdrive.
 18—2.22 on Classic with overdrive.
 19—2.22 on Classic with overdrive.
 20—2.22 on Classic with overdrive.
 21—2.22 on Classic with overdrive.
 22—2.22 on Classic with overdrive.
 23—2.22 on Classic with overdrive.
 24—2.22 on Classic with overdrive.
 25—2.22 on Classic with overdrive.
 26—2.22 on Classic with overdrive.
 27—2.22 on Classic with overdrive.
 28—2.22 on Classic with overdrive.
 29—2.22 on Classic with overdrive.
 30—2.22 on Classic with overdrive.
 31—2.22 on Classic with overdrive.
 32—2.22 on Classic with overdrive.
 33—2.22 on Classic with overdrive.
 34—2.22 on Classic with overdrive.
 35—2.22 on Classic with overdrive.
 36—2.22 on Classic with overdrive.
 37—2.22 on Classic with overdrive.
 38—2.22 on Classic with overdrive.
 39—2.22 on Classic with overdrive.
 40—2.22 on Classic with overdrive.
 41—2.22 on Classic with overdrive.
 42—2.22 on Classic with overdrive.
 43—2.22 on Classic with overdrive.
 44—2.22 on Classic with overdrive.
 45—2.22 on Classic with overdrive.
 46—2.22 on Classic with overdrive.
 47—2.22 on Classic with overdrive.
 48—2.22 on Classic with overdrive.
 49—2.22 on Classic with overdrive.
 50—2.22 on Classic with overdrive.
 51—2.22 on Classic with overdrive.
 52—2.22 on Classic with overdrive.
 53—2.22 on Classic with overdrive.
 54—2.22 on Classic with overdrive.
 55—2.22 on Classic with overdrive.
 56—2.22 on Classic with overdrive.
 57—2.22 on Classic with overdrive.
 58—2.22 on Classic with overdrive.
 59—2.22 on Classic with overdrive.
 60—2.22 on Classic with overdrive.
 61—2.22 on Classic with overdrive.
 62—2.22 on Classic with overdrive.
 63—2.22 on Classic with overdrive.
 64—2.22 on Classic with overdrive.
 65—2.22 on Classic with overdrive.
 66—2.22 on Classic with overdrive.
 67—2.22 on Classic with overdrive.
 68—2.22 on Classic with overdrive.
 69—2.22 on Classic with overdrive.
 70—2.22 on Classic with overdrive.
 71—2.22 on Classic with overdrive.
 72—2.22 on Classic with overdrive.
 73—2.22 on Classic with overdrive.
 74—2.22 on Classic with overdrive.
 75—2.22 on Classic with overdrive.
 76—2.22 on Classic with overdrive.
 77—2.22 on Classic with overdrive.
 78—2.22 on Classic with overdrive.
 79—2.22 on Classic with overdrive.
 80—2.22 on Classic with overdrive.
 81—2.22 on Classic with overdrive.
 82—2.22 on Classic with overdrive.
 83—2.22 on Classic with overdrive.
 84—2.22 on Classic with overdrive.
 85—2.22 on Classic with overdrive.
 86—2.22 on Classic with overdrive.
 87—2.22 on Classic with overdrive.
 88—2.22 on Classic with overdrive.
 89—2.22 on Classic with overdrive.
 90—2.22 on Classic with overdrive.
 91—2.22 on Classic with overdrive.
 92—2.22 on Classic with overdrive.
 93—2.22 on Classic with overdrive.
 94—2.22 on Classic with overdrive.
 95—2.22 on Classic with overdrive.
 96—2.22 on Classic with overdrive.
 97—2.22 on Classic with overdrive.
 98—2.22 on Classic with overdrive.
 99—2.22 on Classic with overdrive.
 100—2.22 on Classic with overdrive.

11—2.49 on Classic with overdrive.
 12—1.59 on Classic with overdrive.
 13—3.15 on Classic with overdrive.
 14—3.15 on Classic with overdrive.
 15—3.15 on Classic with overdrive.
 16—2.22 on Classic with overdrive.
 17—2.22 on Classic with overdrive.
 18—2.22 on Classic with overdrive.
 19—2.22 on Classic with overdrive.
 20—2.22 on Classic with overdrive.
 21—2.22 on Classic with overdrive.
 22—2.22 on Classic with overdrive.
 23—2.22 on Classic with overdrive.
 24—2.22 on Classic with overdrive.
 25—2.22 on Classic with overdrive.
 26—2.22 on Classic with overdrive.
 27—2.22 on Classic with overdrive.
 28—2.22 on Classic with overdrive.
 29—2.22 on Classic with overdrive.
 30—2.22 on Classic with overdrive.
 31—2.22 on Classic with overdrive.
 32—2.22 on Classic with overdrive.
 33—2.22 on Classic with overdrive.
 34—2.22 on Classic with overdrive.
 35—2.22 on Classic with overdrive.
 36—2.22 on Classic with overdrive.
 37—2.22 on Classic with overdrive.
 38—2.22 on Classic with overdrive.
 39—2.22 on Classic with overdrive.
 40—2.22 on Classic with overdrive.
 41—2.22 on Classic with overdrive.
 42—2.22 on Classic with overdrive.
 43—2.22 on Classic with overdrive.
 44—2.22 on Classic with overdrive.
 45—2.22 on Classic with overdrive.
 46—2.22 on Classic with overdrive.
 47—2.22 on Classic with overdrive.
 48—2.22 on Classic with overdrive.
 49—2.22 on Classic with overdrive.
 50—2.22 on Classic with overdrive.
 51—2.22 on Classic with overdrive.
 52—2.22 on Classic with overdrive.
 53—2.22 on Classic with overdrive.
 54—2.22 on Classic with overdrive.
 55—2.22 on Classic with overdrive.
 56—2.22 on Classic with overdrive.
 57—2.22 on Classic with overdrive.
 58—2.22 on Classic with overdrive.
 59—2.22 on Classic with overdrive.
 60—2.22 on Classic with overdrive.
 61—2.22 on Classic with overdrive.
 62—2.22 on Classic with overdrive.
 63—2.22 on Classic with overdrive.
 64—2.22 on Classic with overdrive.
 65—2.22 on Classic with overdrive.
 66—2.22 on Classic with overdrive.
 67—2.22 on Classic with overdrive.
 68—2.22 on Classic with overdrive.
 69—2.22 on Classic with overdrive.
 70—2.22 on Classic with overdrive.
 71—2.22 on Classic with overdrive.
 72—2.22 on Classic with overdrive.
 73—2.22 on Classic with overdrive.
 74—2.22 on Classic with overdrive.
 75—2.22 on Classic with overdrive.
 76—2.22 on Classic with overdrive.
 77—2.22 on Classic with overdrive.
 78—2.22 on Classic with overdrive.
 79—2.22 on Classic with overdrive.
 80—2.22 on Classic with overdrive.
 81—2.22 on Classic with overdrive.
 82—2.22 on Classic with overdrive.
 83—2.22 on Classic with overdrive.
 84—2.22 on Classic with overdrive.
 85—2.22 on Classic with overdrive.
 86—2.22 on Classic with overdrive.
 87—2.22 on Classic with overdrive.
 88—2.22 on Classic with overdrive.
 89—2.22 on Classic with overdrive.
 90—2.22 on Classic with overdrive.
 91—2.22 on Classic with overdrive.
 92—2.22 on Classic with overdrive.
 93—2.22 on Classic with overdrive.
 94—2.22 on Classic with overdrive.
 95—2.22 on Classic with overdrive.
 96—2.22 on Classic with overdrive.
 97—2.22 on Classic with overdrive.
 98—2.22 on Classic with overdrive.
 99—2.22 on Classic with overdrive.
 100—2.22 on Classic with overdrive.

11—2.49 on Classic with overdrive.
 12—1.59 on Classic with overdrive.
 13—3.15 on Classic with overdrive.
 14—3.15 on Classic with overdrive.

AUTOMATIC TRANSMISSIONS

PASSENGER CARS

PASSENGER CARS MAKE AND MODEL	TRADE NAME	Type	Manual Selector Positions (left to right)	GEAR RATIOS				TORQUE CONVERTER				LUBRICATION											
				1st or Low Range	2nd or Drive Range	3rd or Inter- mediate Range	4th Speed	Reverse	Shifting Within Drive Range By Accelerator and Governor	Governor-Forced Shift	Downshift Up to (mph)	Number of Elements	Max. Ratio at Stall at Engine RPM	Provided	Speed Range (mph)	Releasees at (mph)	Type of Cooling	Anti-Creep Device	Capacity—Refill (qt.)	Type Recommended	Grade (S.A.E. No.)		
																					Summer	Winter	
AMERICAN MOTORS CORP.	Hydramatic	FCG	N.D3.D4.L.R	3.82	2.63	1.45	1.00	4.30	Y	Y	58	No	2.90-16.50	Y	24-70	20	WC	No	8½	•	•	•	
	Hydramatic	FCG	N.D3.D4.L.R	3.82	2.63	1.45	1.00	4.30	Y	Y	58	No	2.90-16.50	Y	24-70	20	WC	No	11	•	•	•	
	Hydramatic	TCG	P.N.D1.D2.L.R	1.821	1.821	1.001	No	1.631	Y	Y	45	4	2.90-16.50	Y	24-70	20	WC	No	11	•	•	•	
	Metropolitan	Not Available																					
	Nash	Hydramatic	FCG	N.D3.D4.L.R	3.82	2.63	1.45	1.00	4.30	Y	Y	58	No	2.90-16.50	Y	24-70	20	WC	No	8½	•	•	•
	Hydramatic	FCG	N.D3.D4.L.R	3.82	2.63	1.45	1.00	4.30	Y	Y	58	No	2.90-16.50	Y	24-70	20	WC	No	11	•	•	•	
	Hydramatic	TCG	P.N.D1.D2.L.R	1.821	1.821	1.001	No	1.631	Y	Y	45	4	2.90-16.50	Y	24-70	20	WC	No	11	•	•	•	
	Hydramatic	FCG	N.D3.D4.L.R	3.82	2.63	1.45	1.00	4.30	Y	Y	58	No	2.90-16.50	Y	24-70	20	WC	No	8½	•	•	•	
	Rambler	Hydramatic	FCG	N.D3.D4.L.R	3.82	2.63	1.45	1.00	4.30	Y	Y	58	No	2.90-16.50	Y	24-70	20	WC	No	11	•	•	•
	Chrysler	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1630	No		AC	No	10	•	•	•	
CHRYSLER CORP.	Chrysler	Power Filte	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1635	No		AC	No	11	•	•	•		
	8-C-71	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1635	No		AC	No	10	•	•	•	
	8-C-72	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1635	No		AC	No	11	•	•	•	
	8-C-72-300	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1635	No		AC	No	10	•	•	•	
	8-S-23	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1650	No		AC	No	10	•	•	•	
	8-S-24	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1330	No		AC	No	10	•	•	•	
	8-D-62	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1330	No		AC	No	10	•	•	•	
	8-D-63-1	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.70-1970	No		AC	No	10	•	•	•	
	8-D-63-13	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.70-1970	No		AC	No	10	•	•	•	
	Imperial	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1635	No		WC	No	11	•	•	•	
FORD MOTOR CO.	Plymouth	Power Filte	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.60-1330	No		AC	No	10	•	•	•		
	8-P-28	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.70-1690	No		AC	No	10	•	•	•	
	8-P-29	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.70-1780	No		AC	No	10	•	•	•	
	8-P-29-3 Fury	Power Filte	TCG	N.R.D.L	1.721	1.721	1.001	No	2.381	Y	Y	55	3	2.70-1780	No		AC	No	10	•	•	•	
	Continental	Turbo-drive	TCG	P.R.N.D.L	2.401	2.401	1.471	1.001	2.001	Y	Y	78	3	2.10-1950	No		AC	No	10	•	•	•	
	8-60-A	Formidonic	TCG	P.R.N.Dr.Lo	2.401	2.401	1.471	1.001	2.001	Y	Y	82	3	2.10-1840	No		AC	No	9½	•	•	•	
	8	Formidonic	TCG	P.R.N.Dr.Lo	2.401	2.401	1.471	1.001	2.001	Y	Y	85	3	2.10-1840	No		AC	No	9½	•	•	•	
	8-40-A, 40-B	Formidonic	TCG	P.R.N.Dr.Lo	2.401	2.401	1.461	1.001	2.001	Y	Y	85	3	2.10-1710	No		AC	No	9½	•	•	•	
	8-73-A, 73-B	Turbo-drive	TCG	P.R.N.Dr.Lo	2.401	2.401	1.471	1.001	2.001	Y	Y	73	3	2.10-1850	No		AC	No	10	•	•	•	
	Mercury	Mer comatic	TCG	P.R.N.Dr.Lo	2.401	2.401	1.471	1.001	2.001	Y	Y	69	3	2.10-1690½	No		AC	No	10½	•	•	•	
GENERAL MOTORS CORP.	Buick	Dynaflow	P.N.D.L.R	1.821	1.001	No	No	1.821	Y	Ne	40	5	3.10-1850½	No		WC	No	10½	•	•	•		
	8-40, 50, 60, 70	Hydramatic	TCG	P.N.Dr.Dr3.Lo.R	3.97	2.65	1.55	1.00	4.31	Y	Y	70½	No	3.10-1850½	No		WC	No	11½	•	•	•	
	8-60	Powerglide	TCG	P.N.D.L.R	1.821	1.001	No	No	1.821	Y	Y	50	3	2.10-	No		OC	No	11½	•	•	•	
	6, 8-1500, 2100, 2400	Powerglide	TCG	P.N.D.L.R	1.821	1.821	No	No	1.821	Y	Y	50	3	2.10-	No		No	No	11	•	•	•	
	8-2934	Powerglide	TCG	P.N.D.L.R	1.821	1.821	No	No	1.821	Y	Y	50	3	2.10-	No		No	No	11	•	•	•	
	8-2934	Powerglide	TCG	N.Dr.S.Lo.R	3.82	2.63	1.45	1.00	4.30	Y	Y	85	No		No		No	No	11½	•	•	•	
	Oldsmobile	Hydramatic	FCG	P.N.Dr.S.Lo.R	3.97	2.55	1.55	1.00	4.31	Y	Y	85	No		No		No	No	11	•	•	•	
	8-Super 88, 98	Hydramatic	FCG	P.N.Dr.S.Lo.R	3.97	2.55	1.55	1.00	4.31	Y	Y	85	No		No		No	No	8½	•	•	•	
	8-96-27	Hydramatic	FCG	P.N.Dr.S.Lo.R	4.10	2.63	1.96	1.00	4.82	Y	Y	85	No		No		No	No	9½	•	•	•	
	8-96-28	Hydramatic	FCG	P.N.Dr.Dr3.Lo.R	3.97	2.95	1.95	1.00	4.31	Y	Y	70	No		No		No	No	9½	•	•	•	
STUDEBAKER-PACKARD CORP.	8-5940, 5960	Ultramatic	N.L.H.P.R.D	1.821	1.821	1.001	No	1.631	Y	Y	45	4	2.90-1650*	Y	24-70	20	WC	No	11	•	•	•	
	8-5940, 5960	Ultramatic	N.L.H.P.R.D	1.821	1.821	1.001	No	1.631	Y	Y	45	4	2.90-1650*	Y	24-70	20	WC	No	11	•	•	•	
	8-5680, 5688	Flightomatic	TCG	P.N.D.L.R	2.401	2.401	1.471	1.001	2.001	Y	Y	60	3	2.15-1850	No		AC	No	9	•	•	•	
	8-56-B	Flightomatic	TCG	P.N.D.L.R	2.401	2.401	1.471	1.001	2.001	Y	Y	60	3	2.15-1850	No		AC	No	9	•	•	•	
	8-56-H	Flightomatic	TCG	P.N.D.L.R	2.401	2.401	1.471	1.001	2.001	Y	Y	60	3	2.15-1850	No		AC	No	9	•	•	•	
	8-56-H	Flightomatic	TCG	P.N.D.L.R	2.401	2.401	1.471	1.001	2.001	Y	Y	60	3	2.15-1850	No		AC	No	9	•	•	•	
8-56-J	Ultramatic	TCG	P.N.Dr.Dr.L.R	1.821	1.821	1.001	No	1.631	Y	Y	45	4	2.90-1650	Y	24-70	20	WC	No	11	•	•	•	

ABBREVIATIONS
 1—Automatic transmission fluid type "A."
 2—With 8.40 compression ratio only;
 2.10-17.10 with 9.00 compression
 ratio.
 3—Torque converter with gears.
 WC—Water cooled.
 Y—Yes.
 N—Neutral.
 No—No or none.
 OC—Plate type oil cooler.
 AC—Air cooled.
 R—Reverse.
 S—Super performance range.

• PASSENGER CARS •

PROPELLER SHAFT, AND REAR AXLE

PASSENGER CAR MAKE AND MODEL	PROPELLER SHAFT				REAR AXLE										Lubricant																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Type	Intermediate Bearing	Universals		Torque Taken Through	Type	Gear Type	Gearing				Pinion Adjustment	Capacity (Pl.)	Type Recommended	S A E																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
			Make	Number Used				Type	Bearing	Type	Lubrication				Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type

ABBREVIATIONS

1—Or 35-S.
2—Single case, two-piece unit.
3—4.40 (40-9) optional.
4—4.10 (41-10) optional.
5—Or 35-S; 4.10 (41-10) optional.
6—Or 35-S; 4.10 (41-10) optional.
7—N, X or 35-S optional.
8—5015 Deluxe 4 dr. Sedan, 3.07 (43-14) standard; 3.31 (43-13), 3.58 (43-12) optional.
9—Front only; rear, cross companion flange.
10—Front only; rear, cross companion flange.
11—Optional ratios available: 3.08 (40-13), 3.36 (37-11), 3.54 (39-11), 3.73 (41-11), 3.91 (43-11), 3.90 (39-10), 4.00 (40-10), 4.10 (41-10), 4.30 (43-10), 4.56 (44-9), 4.89 (44-9), 5.38 (43-8), 5.83 (35-6), 6.17 (37-6).
12—Cross only; ball and trunion, chain.
13—4.11 optional.
14—3.89 optional.
15—3.56 optional.
16—Front only; rear, split joint and companion flange.
17—Front and rear only; intermediate, split joint.
18—3.78 optional.
19—Front only; rear, flanged U-bolt.
20—3.31 (43-13) with air conditioning.
21—4.09 optional.
22—3.73 optional.
23—3.34 optional.
24—3.36 optional except on Eldorado cars.
25—Universal Products with auto. trans.
26—Front, ball and trunion; rear, cross and yoke with auto. trans.
27—Spicer only; Universal Products, pre-packed.
28—2.87, 3.31, 3.54, 4.10 optional.
29—2.87, 3.07, 3.31, 4.10 optional.
30—Classic, 4.09.
31—Optional ratios available: 3.54, 3.90, 4.10, 4.30.
32—Optional ratios available: 3.09, 4.30, 4.10.
33—Optional ratios available: 3.75, 3.90, 4.10.
34—Optional ratios available: 3.54, 3.90, AF—Anti friction.
35—Universal Products with auto. trans.
36—Front, ball and trunion; rear, cross and yoke with auto. trans.
37—Spicer only; Universal Products, pre-packed.
38—2.87, 3.31, 3.54, 4.10 optional.
39—2.87, 3.07, 3.31, 4.10 optional.
40—Classic, 4.09.
41—Optional ratios available: 3.54, 3.90, 4.10, 4.30.
42—Optional ratios available: 3.09, 4.30, 4.10.
43—Optional ratios available: 3.75, 3.90, 4.10.
44—Optional ratios available: 3.54, 3.90, 4.10.
45—Optional ratios available: 3.54, 3.90, 4.10.
46—Optional ratios available: 3.54, 3.90, 4.10.
47—Optional ratios available: 3.54, 3.90, 4.10.
48—Optional ratios available: 3.54, 3.90, 4.10.
49—Optional ratios available: 3.54, 3.90, 4.10.
50—Optional ratios available: 3.54, 3.90, 4.10.
51—Optional ratios available: 3.54, 3.90, 4.10.
52—Optional ratios available: 3.54, 3.90, 4.10.
53—Optional ratios available: 3.54, 3.90, 4.10.
54—Optional ratios available: 3.54, 3.90, 4.10.
55—Optional ratios available: 3.54, 3.90, 4.10.
56—Optional ratios available: 3.54, 3.90, 4.10.
57—Optional ratios available: 3.54, 3.90, 4.10.
58—Optional ratios available: 3.54, 3.90, 4.10.
59—Optional ratios available: 3.54, 3.90, 4.10.
60—Optional ratios available: 3.54, 3.90, 4.10.
61—Optional ratios available: 3.54, 3.90, 4.10.
62—Optional ratios available: 3.54, 3.90, 4.10.
63—Optional ratios available: 3.54, 3.90, 4.10.
64—Optional ratios available: 3.54, 3.90, 4.10.
65—Optional ratios available: 3.54, 3.90, 4.10.
66—Optional ratios available: 3.54, 3.90, 4.10.
67—Optional ratios available: 3.54, 3.90, 4.10.
68—Optional ratios available: 3.54, 3.90, 4.10.
69—Optional ratios available: 3.54, 3.90, 4.10.
70—Optional ratios available: 3.54, 3.90, 4.10.
71—Optional ratios available: 3.54, 3.90, 4.10.
72—Optional ratios available: 3.54, 3.90, 4.10.
73—Optional ratios available: 3.54, 3.90, 4.10.
74—Optional ratios available: 3.54, 3.90, 4.10.
75—Optional ratios available: 3.54, 3.90, 4.10.
76—Optional ratios available: 3.54, 3.90, 4.10.
77—Optional ratios available: 3.54, 3.90, 4.10.
78—Optional ratios available: 3.54, 3.90, 4.10.
79—Optional ratios available: 3.54, 3.90, 4.10.
80—Optional ratios available: 3.54, 3.90, 4.10.
81—Optional ratios available: 3.54, 3.90, 4.10.
82—Optional ratios available: 3.54, 3.90, 4.10.
83—Optional ratios available: 3.54, 3.90, 4.10.
84—Optional ratios available: 3.54, 3.90, 4.10.
85—Optional ratios available: 3.54, 3.90, 4.10.
86—Optional ratios available: 3.54, 3.90, 4.10.
87—Optional ratios available: 3.54, 3.90, 4.10.
88—Optional ratios available: 3.54, 3.90, 4.10.
89—Optional ratios available: 3.54, 3.90, 4.10.
90—Optional ratios available: 3.54, 3.90, 4.10.
91—Optional ratios available: 3.54, 3.90, 4.10.
92—Optional ratios available: 3.54, 3.90, 4.10.
93—Optional ratios available: 3.54, 3.90, 4.10.
94—Optional ratios available: 3.54, 3.90, 4.10.
95—Optional ratios available: 3.54, 3.90, 4.10.
96—Optional ratios available: 3.54, 3.90, 4.10.
97—Optional ratios available: 3.54, 3.90, 4.10.
98—Optional ratios available: 3.54, 3.90, 4.10.
99—Optional ratios available: 3.54, 3.90, 4.10.
100—Optional ratios available: 3.54, 3.90, 4.10.

• PASSENGER CARS •

PASSENGER CAR MAKE AND MODEL	TIRES		SERVICE BRAKES										PARKING BRAKES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	Rev./Mile at 30 mph	Type	Booster Type	Effective Area (sq. in.)	Percent Effectiveness— Rear	Drum		Brake Lining				Wheel Cylinder Bore		Available Pedal Travel	Shoe Clearance 100 lb. Pressure at 1 in. Pedal Load	Type of Control	Location of Control	Operates on																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
						Type and Material		Diameter	Front	Rear	Material	Segments per Shoe	Size (length-width-thickness)						Front Wheel	Rear Wheel	Segments per Shoe	Size (length-width-thickness)	Front Wheel	Rear Wheel																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
						Front	Rear																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
AMERICAN MOTORS CORP.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Hudson	748.0	6.70/15	Vac	159.9	43	CIA	10	10	10	10	Mo	1	8 1/2"x2 1/4"	8 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	10 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	10 1/2"x1 1/2"x3/32	1	6	669	.015	HL	UL	RB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
6-35540	727.0	7.10/15	Vac	187.9	43	CIA	11	11	11	11	Mo	1	10 1/2"x2 1/4"	10 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	6	669	.015	HL	UL	RB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
6-35560	726.0	7.60/15	Vac	187.9	43	CIA	11	11	11	11	Mo	1	10 1/2"x2 1/4"	10 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	6	669	.015	HL	UL	RB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Metropolitan	748.0	6.70/15	Vac	159.9	43	CIA	10	10	10	10	Mo	1	8 1/2"x2 1/4"	8 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	10 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	10 1/2"x1 1/2"x3/32	1	6	650	.015	HL	UL	RB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Nash	737.0	7.10/15	Vac	187.9	43	CIA	11	11	11	11	Mo	1	10 1/2"x2 1/4"	10 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	6	650	.015	HL	UL	RB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
6-5680	726.0	7.60/15	Vac	187.9	43	CIA	11	11	11	11	Mo	1	10 1/2"x2 1/4"	10 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	6	650	.015	HL	UL	RB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
6-5680	726.0	7.60/15	Vac	187.9	43	CIA	11	11	11	11	Mo	1	10 1/2"x2 1/4"	10 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	11 1/2"x1 1/2"x3/32	1	6	650	.015	HL	UL	RB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
6-5610	735.0	6.40/15	Vac	148.3	35	CIA	9	9	9	9	Mo	1	7 1/2"x2 1/4"	7 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	7 1/2"x1 1/2"x3/32	1	11 1/2"x2 1/4"	7 1/2"x1 1/2"x3/32	1	6 1/2	662	.015	HL	UL	RB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CHRYSLER CORP.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									</

RS—Right of steering column.
 RT—Rear of transmission.
 SO—Step on, left foot operated.
 TD—Transmission drive shaft.
 TH—¹/₂ handle, multiple pawl ratchet.
 UL—Under instrument panel, left of steering column.
 Vac—Vacuum.

LF—Left side of floor board.
LS—Left of steering column.
MA—Moulded asbestos.
Mo—Moulded.
N—No or none.
NM—No major adjustment required.
R—Riveted.
RB—Rear service brakes.

CI—Cast iron.
CIA—Cast iron alloy.
Co—Composite.
FF—Floating, eccentric adjustment.
FP—Foot pedal control.
H—Hydraulic, internal expanding.
HL—Hand lever.
LC—Left side row band.

12—Classic, 739.0; all other models, 753.0.
13—Classic, 710/15.
14—Adjust to light drag and back off seven notches.
15—Bonded.
16—Centrifuge.
17—Case handle, twist release

U. S. Royal only; Goodrich, 717.0; Firestone, 711.0.
U. S. Royal only; Goodrich and Firestone, 706.0.
Top only; bottom, .015.
Station wagon, 753.0; all other models, 771.0.
Station wagon, 670/15.

ABBREVIATIONS

1—1100 with power brakes,
2—1200 with power brakes,
3—Front only; rear, centrifuse,
4—1150 with power brakes,
5—8.20/15 with air conditioning,
4.13 with power brakes

• PASSENGER CARS •

FRONT SUSPENSION AND STEERING

PASSENGER CAR MAKE AND MODEL	FRONT SUSPENSION					STEERING					Power					Linkage														
	Spring					Shock Absorbers					Turning Diameter					Mechanical					Gear					Pump Driven By				
	Type	Free Length	I. D. of Coil	Spring Rate (lb. per in.)	Rate at Wheel (lb. per in.)	Normal Load (lb. @ rated length)	Make	Type	Piston Diam. (in.)	Stabilizer—Type	Wheel Diameter	Curb to Curb (outside front)		Inside Wheel Angle at 20 (deg.)	Type	Make	Gear		Type	Make	Gear		Type	Make	Pump Driven By	Location	Drag Link	The Rods		
												Wall to Wall (outside front)	Wear to Wear (outside front)				Over-All	Ratios (to-1)			Over-All	Ratios (to-1)								
AMERICAN MOTORS CORP.	8-3840 Hudson	ICS	Co	55%	100	84	Mon	D	N	18	41 1/2"	39 3/4"	24	WR	Gem	20.0	26.0	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
	8-3850 Hudson	ICS	Co	55%	115	100	Mon	D	N	18	45 3/4"	42 5/8"	24	WR	Gem	20.0	26.3	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
	8-3860 Hudson	ICS	Co	55%	123	115	Mon	D	N	18	45 3/4"	42 5/8"	24	WR	Gem	20.0	26.3	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
	8-3880 Hudson	ICS	Co	55%	123	115	Mon	D	N	18	45 3/4"	42 5/8"	24	WR	Gem	20.0	26.3	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
	8-3890 Hudson	ICS	Co	55%	123	115	Mon	D	N	18	45 3/4"	42 5/8"	24	WR	Gem	20.0	26.3	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
Metropolitan	4-561, 562 Nash	ICS	Co	55%	100	84	Mon	D	N	18	45 3/4"	42 5/8"	24	WR	Gem	20.0	26.3	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
	8-5640 Hudson	ICS	Co	55%	115	100	Mon	D	N	18	45 3/4"	42 5/8"	24	WR	Gem	20.0	26.3	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
	8-5660 Hudson	ICS	Co	55%	123	115	Mon	D	N	18	45 3/4"	42 5/8"	24	WR	Gem	20.0	26.3	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
	8-5680 Hudson	ICS	Co	55%	123	115	Mon	D	N	18	45 3/4"	42 5/8"	24	WR	Gem	20.0	26.3	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
	8-5610 Hudson	ICS	Co	55%	123	115	Mon	D	N	18	45 3/4"	42 5/8"	24	WR	Gem	20.0	26.3	Lk	Mon	WR	18.2	23.9	B	BS	R	R	Tr	Tr		
CHRYSLER CORP.	8-C-71 Chrysler	ICS	Co	4	480	2380-11L	Chr	D	N	18	46 5/8"	43 9/8"	24 1/2	WR	Gem	20.4	30.9	In	Chr	RGR	18.2	20.3	G	SE	R	R	Tr	Tr		
	8-C-72 Chrysler	ICS	Co	4	480	2475-11L	Chr	D	N	18	46 5/8"	43 9/8"	24 1/2	WR	Gem	20.4	30.9	In	Chr	RGR	18.2	20.3	G	SE	R	R	Tr	Tr		
	8-C-73 Chrysler	ICS	Co	4	480	2475-11L	Chr	D	N	18	46 5/8"	43 9/8"	24 1/2	WR	Gem	20.4	30.9	In	Chr	RGR	18.2	20.3	G	SE	R	R	Tr	Tr		
	8-C-74 Chrysler	ICS	Co	4	480	2475-11L	Chr	D	N	18	46 5/8"	43 9/8"	24 1/2	WR	Gem	20.4	30.9	In	Chr	RGR	18.2	20.3	G	SE	R	R	Tr	Tr		
	8-C-75 Chrysler	ICS	Co	4	480	2475-11L	Chr	D	N	18	46 5/8"	43 9/8"	24 1/2	WR	Gem	20.4	30.9	In	Chr	RGR	18.2	20.3	G	SE	R	R	Tr	Tr		
De Soto	8-S-23, S-24 Dodge	ICS	Co	4	415	1475-11L	Do	D	N	18	43 0/8"	42 3/8"	24 1/2	WR	Do	18.2	27.1	In	Do	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
	8-D-62 Dodge	ICS	Co	4	415	1475-11L	Do	D	N	18	43 0/8"	42 3/8"	24 1/2	WR	Do	18.2	27.1	In	Do	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
	8-D-63 Dodge	ICS	Co	4	415	1475-11L	Do	D	N	18	43 0/8"	42 3/8"	24 1/2	WR	Do	18.2	27.1	In	Do	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
	8-D-64 Dodge	ICS	Co	4	415	1475-11L	Do	D	N	18	43 0/8"	42 3/8"	24 1/2	WR	Do	18.2	27.1	In	Do	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
	8-D-65 Dodge	ICS	Co	4	415	1475-11L	Do	D	N	18	43 0/8"	42 3/8"	24 1/2	WR	Do	18.2	27.1	In	Do	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
Imperial	8-C-70 Chrysler	ICS	Co	4	515	1680-11L	Chr	D	N	18	52 5/8"	51 1/8"	24 1/2	WR	Chr	18.2	22.5	In	Chr	RGR	18.2	20.3	G	DLS	R	R	Tr	Tr		
	8-C-71 Chrysler	ICS	Co	4	515	1680-11L	Chr	D	N	18	52 5/8"	51 1/8"	24 1/2	WR	Chr	18.2	22.5	In	Chr	RGR	18.2	20.3	G	DLS	R	R	Tr	Tr		
	8-C-72 Chrysler	ICS	Co	4	515	1680-11L	Chr	D	N	18	52 5/8"	51 1/8"	24 1/2	WR	Chr	18.2	22.5	In	Chr	RGR	18.2	20.3	G	DLS	R	R	Tr	Tr		
	8-C-73 Chrysler	ICS	Co	4	515	1680-11L	Chr	D	N	18	52 5/8"	51 1/8"	24 1/2	WR	Chr	18.2	22.5	In	Chr	RGR	18.2	20.3	G	DLS	R	R	Tr	Tr		
	8-C-74 Chrysler	ICS	Co	4	515	1680-11L	Chr	D	N	18	52 5/8"	51 1/8"	24 1/2	WR	Chr	18.2	22.5	In	Chr	RGR	18.2	20.3	G	DLS	R	R	Tr	Tr		
Plymouth	8-P-26 Plymouth	ICS	Co	4	385	1415-11L	Ply	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Ply	18.2	22.5	In	Ply	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
	8-P-27 Plymouth	ICS	Co	4	385	1415-11L	Ply	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Ply	18.2	22.5	In	Ply	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
	8-P-28 Plymouth	ICS	Co	4	415	1625-11L	Ply	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Ply	18.2	22.5	In	Ply	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
	8-P-29 Plymouth	ICS	Co	4	415	1625-11L	Ply	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Ply	18.2	22.5	In	Ply	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
	8-P-30 Plymouth	ICS	Co	4	600	1330-11	Ply	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Ply	18.2	22.5	In	Ply	RGR	18.2	20.1	G	DLS	R	R	Tr	Tr		
FORD MOTOR CO.	8-40A Continental	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-50A Ford	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-80A Lincoln	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-73A Mercury	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-73B Buick	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
GENERAL MOTORS CORP.	8-40, 60 Buick	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-50, 70 Buick	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-80 Buick	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-82 Cadillac	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-84 Cadillac	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
Chevrolet	8-75 Chevrolet	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-1500, 2100 Chevrolet	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-2934 Oldsmobile	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-88 Oldsmobile	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-56-27 Pontiac	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
STUDEBAKER-PACKARD CORP.	8-56-28 Studebaker	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-56-29 Studebaker	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-56-30 Studebaker	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-56-31 Studebaker	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-56-32 Studebaker	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
STUDEBAKER-PACKARD CORP.	8-56-40 Studebaker	ICS	Co	15 1/2	450	2680-9 1/2	Gab	D	N	18	47 3/8"	45 3/8"	24 1/2	WR	Gab	18.2	22.5	In	Gab	RGR	18.2	20.1	G	SE	R	R	Tr	Tr		
	8-56-41 Studebaker	ICS	Co	15 1/2	450	2680-9 1																								

PASSENGER CARS

1956

BRITISH

MAKE AND MODEL	ENGINE								GENERAL DATA														REAR AXLE		Shipping Weight (Lb.)		
	Number of Cylinders Bore and Stroke (In.)	Maximum Brake Hp. at Specified R.P.M.	Piston Displacement (Cu In.)	Compression Ratio (To — 1)	Cylinder Arrangement	Valve Location	Piston Material	Camshaft Drive	TREAD				OVERALL DIMENSIONS (In.)				Oil Pressure to—	Carburetors—No. Used and Type	Cooling System	Shifting Method	No. of Forward Speeds	Final Drive Type	Gear Ratio (To — 1)	Torque Taken By		Independent Suspension	Service Brakes
									Wheelbase (In.)	FRONT		Rear (In.)	Length Including Bumpers and Bumper Guards	Width	Height—Road to Roof, No Load	Tires (In.)											
										Front (In.)	Rear (In.)																
A.C.	Ace	6-2.56x3.94	90-4500	121.5	8.00	IL	IH AA	Ch	90.0	50.0	50.0	151.5	59.5	35.0			3-SU	HS	4	Hy	3.64	Sp	Fr	H	1685		
	2 Litre	6-2.56x3.94	76-4500	121.5	6.75	IL	IH AA	Ch	117.0	55.0	56.0	184.0	67.0	61.0			3-SU	HS	4	Hy	4.55	N	Fr	H	2912		
	Acceca	6-2.56x3.94	90-4500	121.5	8.00	IL	IH AA	Ch	90.0	50.0	50.0	160.0	61.0	52.0	5.50/16	abce	3-SH	TP			3.91	Sp	Fr	H	1848		
Alvis	T.C.100/G	6-3.30x3.54	104-4000	182.8	8.00	IL	IH AA	Ch	111.5	54.6	54.1	182.5	66.0	62.5	6.00/15	abce	2-Ho	Pu	HS	4	Hy	3.77	Sp	Fr	H	3085	
Armstrong-Siddeley	30HP	6-3.54x3.54	125-4700	209.6	7.00	IL	IH AA	Ch	114.0	56.6	57.5	193.0	72.0	63.0	6.70/16	abce	1-Do	Pu	(1)	4	Hy	4.09	Sp	Fr	H	3472	
	234	6-3.54x3.54	120-5000	139.7	7.50	IL	IH AA	Ch	111.0	55.1	54.3	180.0	68.5	61.8	6.40/15	abce	2-Do	Pu	HS	4	Hy	4.55	Sp	Fr	H	2912	
	236	6-2.76x3.94	85-4500	149.7	7.50	IL	IH AA	Ch	111.0	55.1	54.3	180.0	68.5	61.8	6.40/15	abce	1-Do	Pu	HS	4	Hy	4.55	Sp	Fr	H	2912	
Aston-Martin	DB2-4MkII	6-3.27x3.54	140-5000	178.2	8.20	IL	IH AA	Ch	99.0	54.0	54.0	171.5	65.0	53.5	6.00/16	abc	2-Ho	Pu	HS	4	Hy	3.77	Sp	Fr	H	2632	
Austin	A30-7	4-2.28x3.00	28-4800	48.8	7.20	IL	IH AA	Ch	79.5	45.3	44.8	136.4	55.1	59.3	5.20/13	abce	1-Do	Pu	HS	4	Hy	5.13	Sp	Fr	HM	1582	
	A135	6-3.44x4.38	244.0	6.80	IL	IH AA	Ch	119.5	58.0	60.0	196.5	74.5	66.0	6.50/16	abce	1-Do	Pu	HS	4	Hy	4.09	Sp	Fr	H	3472		
	A90-6	6-3.13x3.50	85-4000	161.0	7.30	IL	IH AA	Ch	103.8	51.5	51.3	170.3	64.0	63.8	6.40/15	abce	1-SD	Pu	HS	4	Hy	3.91	Sp	Fr	H	2912	
	A40	4-2.57x3.50	42-4500	73.2	7.20	IL	IH AA	Ch	99.3	48.5	49.0	162.3	61.5	61.5	5.60/15	abce	1-Do	Pu	HS	4	Hy	4.88	Sp	Fr	H	2240	
	A50	4-2.88x3.50	50-4400	91.5	7.20	IL	IH AA	Ch	99.3	48.5	49.0	162.3	61.5	61.5	5.60/15	abce	1-Do	Pu	HS	4	Hy	4.88	Sp	Fr	H	2240	
Austin-Healey	100	4-3.44x4.38	90-4000	162.2	7.50	IL	IH AA	Ch	90.0	49.0	50.0	151.0	60.5	49.3	5.90/15	abce	2-Ho	Pu	HS	4	SB	3.90	Sp	Fr	H	2176	
	100S	4-3.44x4.38	132-4700	162.2	8.30	IL	IH AA	Ch	90.0	49.0	50.0	148.0	60.5	42.0	5.50/15	abce	2-St	Pu	HS	4	SB	2.92	Sp	Fr	H	1888	
Bentley	S Series Saloon	6-3.75x4.50	295.0	6.60	IL	F	AA	HG	123.0	58.0	60.0	212.0	74.0	64.0	8.20/15	abce	2-SD	Pu	Au	4	Hy	3.42	Sp	Fr	HM	4145	
	Continental	6-3.75x4.50	295.0	7.25	IL	F	AA	HG	123.0	58.0	60.0	210.5	72.0	62.0	7.60/15	abce	2-SD	Pu	Au	4	Hy	2.92	Sp	Fr	HM	3790	
Citroen	2CV-A	2-2.44x2.44	9-3800	22.9	6.20	HO	IH	AA	SG	93.5	49.6	49.6	148.8	58.3	63.0	4.90/15	abce	1-SD	AC	HS	4	SB*	3.87*	Sp*	Fr	H	1120
	Light 15	4-2.99x3.94	56-4250	116.6	6.50	IL	IH	AA	Ch	114.5	54.0	53.3	175.0	65.3	60.0	6.50/15	abce	1-SD	Pu	HS	3	SB*	3.46*	Sp*	Fr	H	2360
	Big 15	4-2.99x3.94	56-4250	116.6	6.50	IL	IH	AA	Ch	121.5	58.5	57.8	186.0	70.0	61.0	6.50/15	abce	1-SD	Pu	HS	3	SB*	3.46*	Sp*	Fr	H	2548
	6 Cylinder	6-2.99x3.94	78-3800	174.6	6.50	IL	IH	AA	Ch	121.5	58.5	58.5	191.0	70.0	61.0	7.25/15	abce	1-DD	Pu	HS	3	SB*	3.87*	Sp*	Fr	H	2940
	2CV-AZ	2-2.60x2.44	12-3800	25.9	6.20	HO	IH	AA	SG	93.5	49.6	49.6	148.8	58.3	63.0	4.90/15	abce	1-Do	AC	HS	4	SB	3.87	Sp	Fr	H	2484
	2 Litre DS-19	4-3.07x3.94	76-4500	291.8	7.50	IL	IH	AS	Ch	123.0	59.0	61.3	199.0	70.5	58.0	6.50/15	abce	1-DD	Pu	HS	4	SB	3.89	RA	FR	H	2484
Daimler	104	6-3.25x4.25	137-4400	211.5	7.60	IL	IH	AA	Ch	114.0	56.0	57.0	193.0	71.0	62.5	6.50/16	abce	2-Ho	Pu	Pr	4	Hy	3.92	Sp	Fr	H	4032
	Four Light Saloon	6-3.75x4.25	167-4200	282.0	7.00	IL	IH	AA	Ch	114.0	56.0	57.0	194.1	70.5	60.0	7.00/16	abce	2-Ho	Pu	Pr	4	Hy	4.27	Sp	Fr	H	4256
	Conquest	6-3.00x3.50	75-4000	148.4	7.00	IL	IH	AA	Ch	104.0	52.0	52.0	176.0	65.0	62.0	6.70/15	abce	1-Do	Pu	Pr	4	Hy	4.56	Sp	Fr	HM	3060
	Conquest Roadster	6-3.00x3.50	100-4400	148.4	7.75	IL	IH	AA	Ch	104.0	52.0	52.0	178.0	64.0	55.0	5.00/15	abce	2-Ho	Pu	Pr	4	Hy	3.73	Sp	Fr	HM	2680
	Regina	6-3.75x4.25	167-4200	282.0	7.00	IL	IH	AA	Ch	130.0	60.0	63.0	217.0	74.0	72.0	7.90/16	abce	2-Ho	Pu	Pr	4	Hy	4.27	Sp	Fr	H	5120
Dellow	MKII	4-2.50x3.64	37-4400	71.5	7.00	IL	L	AA	Ch	83.0	45.0	45.0	138.0	53.0	51.0	5.50/16	abce	1-Do	Pu	HS	3	SB	5.50	TT	N	M	1288
	MKV	4-2.50x3.64	37-4400	71.5	7.50	IL	L	AA	Ch	84.0	45.0	45.0	138.0	54.0	47.0	5.50/16	abce	(2)	Pu	HS	3	SB	4.70	TT	N	M	1234
Fairthorpe	Atom I	1-1.85x2.35	11-5400	15.5	6.50	IL	IH	AA	SG	89.0	48.0	48.0	134.0	62.0	54.0	5.20/13	abce	1-St	AC	HS	3	Ch		TA	FR	H	680
	Atom IIA	2-2.36x2.24	15-6000	19.6	6.50	IL	CC	AA	SG	89.0	48.0	48.0	134.0	62.0	54.0	5.20/13	abce	1-St	AC	HS	3	Ch		FR	H		
	Atom III	2-2.75x3.31	35-5750	36.6	6.50	IL	IH	AA	SG	89.0	48.0	48.0	134.0	62.0	54.0	5.20/13	abce	1-St	AC	HS	3	Ch		FR	H		
Ford	Zephyr Six	6-3.13x3.00	68-4200	138.0	6.80	IL	IH	AS	Ch	104.0	50.0	49.0	171.9	63.9	60.8	6.40/13	abce	1-SD	Pu	HS	3	Hy	4.44	Sp	Fr	H	2480
	Consul	4-3.13x3.00	47-4400	92.0	6.80	IL	IH	AS	Ch	100.0	50.0	49.0	166.7	64.0	60.8	5.90/13	abce	1-SD	Pu	HS	3	Hy	4.56	Sp	Fr	H	2255
	Anglia	4-2.50x3.64	36-4500	71.6	7.00	IL	L	AS	Ch	87.0	48.0	47.5	151.3	60.6	58.8	5.20/13	abce	1-SD	Pu	HS	3	SB	4.43	Sp	Fr	H	1623
	Prefect	4-2.50x3.64	36-4500	71.6	7.00	IL	L	AS	Ch	87.0	48.0	47.5	151.3	60.6	58.8	5.20/13	abce	1-SD	Pu	HS	3	SB	4.43	Sp	Fr	H	1721
	Popular	4-2.50x3.64	30-4000	71.6	6.16	IL	L	AS	Ch	90.0	45.0	44.5	152.3	56.5	63.8	4.50/17	abce	1-SD	TS	HS	3	SB	5.50	TT	N	M	1597
	Zephyr Zodiac	6-3.13x3.00	71-4200	138.0	7.50	IL	IH	AS	Ch	104.0	50.0	49.0	171.9	63.9	60.8	6.40/13	abce	1-SD	Pu	HS	3	Hy	4.44	Sp	Fr	H	2522
	Escort	4-2.50x3.64	36-4500	71.6	7.00	IL	L	AS	Ch	87.0	48.0	47.5	151.3	60.6	62.3	5.60/13	abce	1-SD	Pu	HS	3	SB	4.43	Sp	Fr	H	1800
	Squire	4-2.50x3.64	36-4500	71.6	7.00	IL	L	AS	Ch	87.0	48.0	47.5	151.3	60.6	62.3	5.60/13	abce	1-SD	Pu	HS	3	SB	4.43	Sp	Fr	H	1800
Frazer-Nash	Targa Florida Gran Sport	6-2.60x3.78	140-5750	120.2	9.00	IL	IH	AA	Ch	96.0	50.0	52.0	150.0	61.5	53.6	5.50/16	abce	3-Do	Pu	HS	4	SB	3.60	RA	FR	H	1680
	Targa Florida Turismo	6-2.60x3.78	100-5000	120.7	7.50	IL	IH	AA	Ch	96.0	50.0	52.0	150.0	61.5	53.6	5.50/16	abce	3-Do	Pu	HS	4	SB	3.60	RA	FR	H	1680
	Competition Mark II	6-2.60x3.78	140-5750	120.2	9.00	IL	IH	AA	Ch	96.0	50.0	54.0	141.0	63.5	53.6	5.50/16	abce	3-Do	Pu	HS	4	SB	3.60	RA	FR	H	1400
	Fixed Head Coupe	6-2.60x3.78	140-5750	120.2	9.00	IL	IH	AA	Ch	96.0	50.0	52.0	156.0	61.5	51.0	5.50/16	abce	3-Do	Pu	HS	4	SB	3.60	RA	FR	H	1650
	Sebring	6-2.60x3.78	140-5750	120.2	9.00	IL	IH	AA	Ch	96.0	50.0	52.0	156.0	61.5	51.0	5.50/16	abce	3-Do	Pu	HS	4	SB	3.60	RA	FR	H	1680
Hillman	Minx Special Saloon	4-3.00x3.00	47-4400	85.0	7.00	IL	IH	AA	Ch	93.0	48.6	48.6	152.5	62.5	61.0	5.60/15	abce	1-Do	Pu	HS	4	SB	4.78	Sp	Fr	H	2106

OTHER FOREIGN CARS—continued

MAKE AND MODEL	ENGINE							GENERAL DATA											REAR AXLE									
	Number of Cylinders Bore and Stroke (In.)	Maximum Brake Hp. at Specified R.P.M.	Piston Displacement (Cu In.)	Compression Ratio (To - 1)	Cylinder Arrangement	Valve Location	Piston Material	Camshaft Drive	TREAD		OVERALL DIMENSIONS (In.)				Oil Pressure to —	Carburetors—No. Used and Type	Cooling System	Shifting Method	No. of Forward Speeds	Final Drive Type	Gear Ratio (To - 1)	Torque Taken By	Independent Suspension	Service Brakes	Shipping Weight (Lb.)			
									Wheelbase (In.)	Front (In.)	Rear (In.)	Length Including Bumpers and Guards	Width	Height—Road to Roof, No Load												Tires (In.)		
FRANCE—continued																												
Panhard..... Junior Dyna 54	2-1.78x2.85 2-1.78x2.85	42-5000 42-5000	14.2 14.2	7.25 7.25	HO HO	AA AA			83.9 101.4	44.7 51.2	44.7 51.2	145.7 179.9	59.1 63.0	51.2 57.1	5.70 5.70	15 15	1-DD 1-DD	AC AC	HS HS	4 4			FR FR	H H				
Peugeot..... 203 403	4-2.96x2.88 4-3.15x2.88	45-4500 58-4900	78.7 89.5	6.97 7.00	IL IL	IA IA	AA AA	Ch Ch	101.5 104.8	52.0 52.8	52.0 52.0	171.2 176.4	63.5 65.8	61.5 57.9	6.00 6.50	15 15	1-Do 1-Do	Pu Pu	HS HS	4 4	Wo Wo	5.75 5.75	TT TT	Fr Fr	H H	1980 2248		
Renault..... R1062 Sport R1100 R1062 Sport R1101	4-2.15x3.15 4-3.35x3.46 4-2.15x3.15 4-3.46x3.46	26-4100 74-4000 27-4500 78-4400	45.6 121.8 45.6 130.7	7.25 7.00 7.25 7.00	IL IL IL IL	IA IA IA IA	AS AS AS AS	HG HG HG HG	82.7 110.2 82.7 110.2	47.9 255.1 47.9 255.1	48.0 155.1 48.0 155.0	143.2 185.0 143.2 185.0	56.3 67.7 56.3 67.7	57.9 63.0 57.9 63.0	9.00 6.40 9.00 6.40	15 15 15 15	abce abce abce abce	1-Do 1-Do 1-Do 1-Do	Pu Pu Pu Pu	HS HS HS HS	3 4 3 4	SB Ta SB SB	4.71 4.88 4.71 4.88	TA TA	FR FR FR FR	H H H H	1213 2711 1213 2793	
Rovin..... 3CVCD4	2-2.76x2.36	13-3200	28.2		HO				70.9	38.6	38.6	154.0	45.3	39.2	3.50	10	1-SU		HS	3			Sp	N	M			
Salmson..... 2300S	4-3.31x4.13	110-5000	140.3	7.50	IL	IA	AA	HG	105.7	53.9	53.5	173.6	65.7	56.9	6.25	25	ab	1-Dt	Pu	HS	4	SB	3.62		Fr	H		
Simca..... 1300 1300 F52A Vedette 56 F42A	4-2.91x2.95 4-2.91x2.95 8-2.60x2.95 8-2.60x3.38	48-4500 57-4800 80-4600 75-4400	74.5 74.5 143.5 143.5	6.75 7.85 7.20 7.00	IL IL L V	IA IA L L	AA AA AA AA	Ch Ch HG HG	96.1 96.0 106.0 106.0	49.4 49.4 54.0 54.0	49.2 49.2 53.0 53.0	160.0 167.0 178.0 178.0	61.0 62.0 69.1 69.1	57.0 56.0 58.3 58.3	5.60 5.60 3.60 3.60	14 14 13 13	ab ab abce abce	1-SD 1-SD 1-Do 1-Do	Pu Pu Pu Pu	HS HS HS HS	4 4 3 3	Hy Hy Hy Hy	4.44 4.44 3.90 3.90	Sp Sp Sp Sp	Fr Fr Fr Fr	H H H H	2009 2030 3826 2454	
Talbot..... Grand Sport Largo Sport	6-3.66x4.33 4-3.53x3.90	210-4500 120-5000	273.4 152.0	8.00 7.00	IL IL	IA IA	AS AA	Ch Ch	114.2 95.5	55.9 51.2	55.5 51.2	185.5 165.1		6.00 6.50	18 15	abce abce	3-Do 3-Dt	Pu Pu	HS HS	4 4	SB SB	3.35 3.36	Sp TT	Fr Fr	H H	3527 2310		
GERMANY																												
BMW..... 503 507	8-3.23x2.95 8-3.23x2.95	140- 140-	193.0 193.0	7.50 7.50	V V	IA IA	AA AA	Ch Ch	111.6 97.5	55.0 57.0	55.9 56.2	185.5 172.0	68.0 65.0	55.0 50.0	6.00 6.00	16 16	abce abce	2-DD 2-DD	Pu Pu	HS HS	4 5	Hy Hy	3.90 3.70	TA TA	Fr Fr	H H	3180 2530	
Borgward..... Hansa 2400 Pullman Isabella Isabella TS	6-3.07x3.21 4-2.95x3.33 4-2.96x3.33	106- 60-4700 75-	142.6 91.1 91.0	8.00 6.50 8.20	IL IL IL	IA IA IA	AA AA AA	HG HG BG	111.0 102.4 102.4	53.5 52.5 53.7	56.0 53.5 53.5	189.5 172.8 173.0	70.1 67.1 67.2	58.8 57.7 57.7	6.70 7.50 5.90	15 13 13	abce abce abce	1- 1-DS 1-	Pu Pu Pu	HA HS HS	4 4 4	Hy Hy Hy	3.90 3.90 3.90		Sp Fr Fr	FR FR FR	H H H	3311 2205
DKW..... 3-6	3-2.80x2.99	42-4200	54.7		IL	N	AA	N	92.0	50.0	53.0	166.0	66.0	57.5	5.50	15	N	1-Do	TS	HS	4	StB	4.72		FR	H	1863	
Ford..... Taunus 12M 15M	4-2.50x3.84 4-3.23x2.79	43-4250 60-4500	71.7 81.7	6.80 7.00	IL IL	L IA	AS AS	HG HG	98.0 98.0	48.0 48.0	48.0 48.0	160.0 160.0	62.2 62.2	61.0 56.0	5.60 5.13	13 13	abce abce	1-Do 1-SD	Pu Pu	HS HS	3 3	SB Hy	4.44 4.11	Sp Sp	Fr Fr	H H	1810 1904	
Glas..... Parallel-Twin	2-2.28x2.21	17-4800	17.9	6.00	HO		AA	BG	70.8	42.8	42.8	114.2	50.4	51.5	4.40	10	1-	AC			4				FR	H	851	
Goliath..... GP700 700E	2-2.31x3.15 2-3.30x2.30	26-4000 27-4000	42.0 42.0	6.40 7.70	IL IL	AA AS	SG SG	SG	90.6 90.6	49.5 51.7	49.5 49.2	163.4 159.4	63.0 64.2	57.1 57.9	5.60 5.13	15 13	1-Do 1-Do	Pu Pu	HS HS	4 4	HG SG		4.73	Sp Fr	FR FR	H H	1913	
Lloyd LP400S, LS400S LP600, LS600, LC600 LT600	2-2.44x2.52 2-2.26x1.88 2-2.26x1.88	13-3250 19-4500 19-4500	23.5 36.4 36.4	6.85 6.60 6.60	IL IL IL	N IA IA	AA Ch Ch	N Ch Ch	78.7 78.8 92.8	41.3 44.3 47.3	43.3 33.2 47.3	135.8 132.1 139.0	55.3 55.8 60.8	55.1 52.5 63.8	4.25 2.45 5.00	15 15 5.00	N a a	1-St 1-Do 1-Do	AC AC AC	HS HS HS	3 3 3	StB 4.50 4.87	4.82 Sp Fr	FR FR FR	H H H	1003 1100 1320		
Mercedes-Benz..... 220A 190SL 300SC	6-3.15x2.86 4-3.34x3.29 6-3.34x3.47	92-4800 120-5700 200-5400	134.0 115.7 182.9	7.60 8.50 8.55	IL IL IL	IA IA IA	AA AA AA	Ch Ch Ch	106.5 94.5 114.0	56.3 58.5 58.3	57.9 58.0 60.0	185.5 166.0 185.0	69.3 69.0 75.5	59.3 52.0 55.9	3.60 6.40 5.50	13 13 15	abce abce abce	1-Do 2- Pu	Pu HS HS	4 HS HS	4 4 4	Hy 3.90 4.44	1.10 TA TA	TA FR FR	H H H	2920 2560 3640		
Opel..... Olympia, Rekord Caravan Kapitän	4-3.15x2.71 4-3.15x2.91 6-3.15x3.23	51-4200 41-4200 81-4000	90.8 90.8 150.9	6.80 6.90 7.10	IL IL HO	IA IA IA	AS AS AS	HG HG HG	97.9 97.9 108.3	47.2 44.9 54.0	48.9 49.9 54.0	165.8 166.5 168.0	64.0 64.0 69.3	61.0 62.8 61.4	5.60 6.13 6.40	13 13 13	abce abce abce	1-Do 1-Do 1-Do	Pu Pu Pu	HS HS HS	3 3 3	Hy 4.22 3.90	3.90 Fr Fr	FR FR Fr	H H H	1907 2083 2568		
Porsche 356A 1300 Super 356A 1300 356A 1600 356A 1600S 356A 1500GS 550/1500RS	4-2.94x2.91 4-2.94x2.91 4-3.25x2.92 4-3.25x2.92 4-3.35x2.60 4-3.35x2.60	60-5500 44-4200 60-4500 75-5000 100-6200 110-6200	78.7 78.7 97.1 97.1 91.5 91.5	8.20 6.50 7.50 8.50 8.70 9.50	IL HO HO HO HO HO	IA IA IA IA IA IA	AS HG HG HG VS VS	HG HG HG HG VS VS	82.7 82.7 82.7 82.7 82.7 82.7	51.5 51.5 50.2 50.2 50.2 49.2	50.2 50.2 50.2 50.2 50.2 48.2	155.5 155.6 155.7 155.7 155.7 140.2	65.5 65.5 65.8 65.8 65.8 61.1	51.5 25.60 15.60 15.60 15.60 12.40	15 15 15 15 15 13	abce abce abce abce abce ab	2-Do 2-Do 2-SD 2-SD 2-DD 2-DD	AC AC AC AC AC AC	HS HS HS HS HS HS	4 4 4 4 4 4	SB 4.42 4.43 4.43 4.43 4.43	4.10 TA TA TA TA TA	TA FR FR FR FR FR	H H H H H H	1830 1830 1782 1782 1782 1320			
Volkswagen..... 1/11 2/22	4-3.03x2.52 4-3.03x2.52	30-3400 30-3400	72.7 72.7	6.60 6.60	HO HO	IA IA	AS HG	HG HG	94.5 94.5	50.8 53.9	49.2 53.5	160.2 185.0	66.0 68.0	59.1 76.5	1.50 6.40	15 15	abce abce	1-SD 1-SD	AC AC	HS HS	4 4	SB SDR	4.40 6.20	TA TA	FR FR	H H	1530 2370	
ITALY																												
Abarth..... Spyder 210A Berlinetta Fiat 600 Spyder 207A Spyder 208A Berlinetta 209A	4-2.68x2.96	66-6000	66.5	9.00	IL	IA			80.8	48.4	47.6	142.7	61.5	37.1	5.20	14	2-Ho	Pu	HS	4		4.30		Fr	H	1155		
Alfa-Romeo 1900/AR 52 Giulietta Sprint 1900 Super 1900 C Super Sprint 1900 TI Super Giulietta Sedan Giulietta Spider	4-3.25x3.46 4-2.95x2.95 4-3.33x3.46 4-3.33x3.46 4-3.33x3.46 4-2.92x2.96 4-2.92x2.96	85-4400 65-6000 90-5200 115-5500 115-5500 50-5200 85-6000	114.9 78.7 120.5 120.5 120.5 78.6 78.6	7.00 8.00 7.50 8.00 8.00 7.50 7.50	IL IL IL IL IL IL IL	IA IA IA IA IA IA IA	AA Ch Ch Ch Ch Ch Ch	Ch Ch Ch Ch Ch Ch Ch	86.6 93.7 103.5 98.4 103.5 93.8 86.6	51.1 50.1 52.0 51.3 52.0 50.4 50.0	51.1 50.2 52.0 51.3 52.0 50.4 50.0	138.5 153.5 174.8 176.8 174.8 157.2 150.5	58.2 60.6 63.0 63.4 63.0 61.3 61.1	71.6 26.10 38.75 82.25 38.75 55.46 52.46	16 15 15 15 15 15 15	abce abce abce abce abce abce abce	1-SD 1-DD 1-SU 2-DD 2-DD 1-SD 1-DD	Pu Pu Pu Pu Pu Pu Pu	HS HS HS HS HS HS HS	8 4 4 4 4 4 4	SB Hy Hy Hy Hy Hy Hy	4.10 4.55 4.10 4.55 4.10 4.55 4.55	TT Sp TT TT TT TT TT	Fr Fr Fr Fr Fr Fr Fr	H H H H H H H	2870 1764 2513 2206 2513 1937 1780		
Ferrari..... 250 Europa 375 America 375 Millemiglia	12-2.68x2.68 12-3.31x2.68 12-3.31x2.68	200-6300 300-6300 340-7300	180.8 275.8 275.8	8.00 7.50 8.00	V V V	IA IA IA	Ch Ch Ch	Ch Ch Ch	109.2 109.2 105.9	51.7 51.7 52.2	51.5 51.5 52.2			7.10 7.10 5.10	15 15 5	abce abce abce	3-DD 3-DD 3-DD	Pu Pu Pu	HS HS HS	4 4 4				Fr Fr Fr	H H H	2300 2300 1960		

For abbreviations, see page 79

OTHER FOREIGN CARS—concluded

MAKE AND MODEL	ENGINE							GENERAL DATA										REAR AXLE								
	Number of Cylinders Bore and Stroke (In.)	Maximum Brake Hp. at Specified R.P.M.	Piston Displacement (Cu In.)	Compression Ratio (To - 1)	Cylinder Arrangement	Valve Location	Piston Material	Camshaft Drive	TREAD		OVERALL DIMENSIONS (In.)				Oil Pressure to—	Carburetors— No. Used and Type	Cooling System	Shifting Method	No. of Forward Speeds	Final Drive Type	Gear Ratio (To - 1)	Torque Taken By	Independent Suspension	Service Brakes	Shipping Weight (Lb.)	
									Wheelbase (In.)	Front (In.)	Rear (In.)	Length Including Bumpers and Bumper Guards	Width	Height—Rear fenders, No Load												
ITALY—continued																										
500 Mondial	4-3.54x3.07	170-7000	121.1	9.50	IL	IH			88.5	50.3	50.6															
750 Monza	4-4.05x3.54	255-6200	183.0	8.00	IL	IH	SG		88.6	50.3	50.6				6.00/16		2-Dt	Pu	HS	5				Fr	H	1543
250 G-T	12-2.87x2.31	220-7000	180.1	9.00	V	IH			102.4	52.2	52.0				6.00/16		2-Dt	Pu	HS	4					H	
410 SA	12-3.46x2.68	335-6000	302.3	9.00	V	IH	AA	Ch	110.4	57.3	57.1	149.7	67.0	67.0	6.50/16	abc	3-Dt	Pu	HS	5	4	4.30	Sp	Fr	H	2420
735 Sport	6-4.02x3.54	355-6000	268.8	9.00	IL	IH	AA	Ch	92.6	50.3	50.6	132.0	51.5	49.3	6.50/16	abc	3-Dt	Pu	HS	5	4	4.30	Sp	Fr	H	1948
Fiat 1100 (103)	4-2.68x2.95	38-4400	66.4	6.70	IL	IH	AA	Ch	92.1	48.4	47.7	148.6	57.4	58.5	5.20/14	abce	1-SD	Pu	HS	4	Hy	4.30	Sp	Fr	H	1740
1100TV	4-2.68x2.95	50-5200	66.4	7.60	IL	IH	AA	Ch	92.1	48.4	47.7	148.6	57.4	58.5	5.20/14	abce	1-DD	Pu	HS	4	Hy	4.30	Sp	Fr	H	1795
1400A	4-3.23x2.60	50-4600	85.1	7.00	IL	IH	AA	Ch	104.3	52.2	52.0	169.5	65.2	62.0	5.90/14	abce	1-DD	Pu	HS	4	Hy	4.44	TA	Fr	H	2380
1400A Diesel	4-3.23x3.54	40-3200	116.0	20.00	IL	IH	AA	HG	104.3	52.2	52.2	169.5	65.2	62.0	6.40/14	abce	Inj	Pu	HS	4	Hy	4.10	TA	Fr	H	2616
1900A	4-3.23x3.54	70-4000	116.0	7.50	IL	IH	AA	Ch	104.3	52.2	52.2	169.5	65.2	62.0	6.40/14	abce	1-DD	Pu	HS	5	Hy	4.30	TA	Fr	H	2544
1100 Family Car	4-2.68x2.95	38-4400	66.4	6.70	IL	IH	AA	Ch	92.1	48.4	47.7	147.4	57.4	58.5	5.60/14	abce	1-SD	Pu	HS	4	Hy	4.30	Sp	Fr	H	1861
600	4-2.36x2.20	22-4600	38.6	7.00	IL	IH	AA	Ch	78.7	48.2	45.4	126.6	54.3	55.3	5.20/12	abce	1-SD	Pu	HS	4	SB	5.38	FR	H	1234	
Iso Isetta	1-1.89x2.60	10-4500	7.3	6.50	IL	N	AA	N	59.1	47.2	19.7	88.6	52.8	62.0	4.50/10	N	1-St	AC	HS	4	Ch		Sp	Fr	H	728
Lancia C10 Appia	4-2.68x2.95	38-4800	66.5	7.40	V	IH	AA	Ch	97.6	46.4	46.5	152.7	55.9	56.0	5.60/15	abce	1-St	Pu	HS	4	Hy	5.22	Fr	H	1808	
Aurelia	6-2.95x3.37	87-4300	138.2	7.40	V	IH	AA	Ch	112.2	49.2	51.2	176.6	61.4	60.3	6.50/15	abce	1-Dt	Pu	HS	4	SB	4.45	Fr	H	2646	
Aurelia GT2500	6-3.07x3.37	118-5000	149.9	8.00	V	IH	AA	Ch	103.3	49.2	51.2	172.0	61.0	53.5	6.50/15	abce	1-Dt	Pu	HS	4	SB	4.27	Fr	H	2535	
Spider Aurelia GT2500	6-3.07x3.36	110-5100	149.4	8.00	V	IH	AA	Ch	96.4	50.8	48.2	165.3	61.2		6.50/15	abce	1-DD	Pu	HS	4	SB	4.27	TTs	Fr	H	2330
Maserati A6G/2000	6-3.01x2.83	125-6000	121.0	8.50	IL	IH	AA	Ch	100.4	52.8	48.0	155.0	60.0	51.0	6.00/16	abce	3-	Pu	Pr	4	SB	4.75	Fr	H	2100	
A6GCS	6-3.01x2.83	170-7200	121.0	8.75	IL	IH	AA	SG	90.9	52.6	48.0	150.0	60.0	51.0	6.00/16	abce	3-Dt	Pu	Pr	4	SB	Var	Fr	H	1650	
250 F	6-3.31x2.95	250-7200	152.1	12.00	IL	IH	AA	HG	88.0	51.2	49.2	156.0	55.0	39.0	(8)	abce	3-Dt	Pu	Pr	5	SB	Var	Fr	H	1400	
150 S	6-3.11x2.78	130-7500	90.5	8.75	IL	IH	AA	HG	86.7	49.3	47.3	145.0	57.0	30.0	(7)	abce	2-Dt	Pu	Pr	4	Hy	Var	TT	Fr	H	1340
300 S	6-3.31x3.54	250-6200	92.5	8.75	IL	IH	AA	HG	91.0	51.3	49.3	151.0	59.0	33.0	(17)	abce	3-Dt	Pu	Pr	4	DR	Var	TT	Fr	H	1600
O.S.C.A. 1100/2AD	4-2.76x2.80	92-6600	66.6	9.00	IL	IH	AA	Ch	88.6	47.2	45.3	140.0	57.0	41.0	5.00/15	abce	2-	Pu	HS	4	SB	Var	Fr	H	1609	
1500/2AD	4-3.07x3.07	125-6300	90.9	9.30	IL	IH	AA	Ch	88.6	47.2	45.3	140.0	57.0	41.0	(9)	abce	2-	Pu	HS	4	SB	Var	Fr	H	1653	
2000S	6-2.99x2.87	165-6500	121.2	9.00	IL	IH	AA	Ch	88.6	49.6	47.6	149.0	58.0	39.5	(6)	abce	3-	Pu	HS	4	SB	Var	Fr	H	1918	
JAPAN																										
Nissan Datsun 110	4-2.36x2.99	25-4000	52.5	6.50	IL	L	AA	HG	87.4	46.6	46.5	152.0	57.7	60.6	5.00/15	ce	1-SD	Pu	HS	4	Hy	6.43	Sp	N	H	1896
112	4-2.36x2.99	24-4000	52.5	6.50	IL	L	AA	HG	86.6	46.6	46.5	152.0	57.7	60.6	5.00/15	ce	1-SD	Pu	HS	4	Hy	6.43	Sp	N	H	1892
Ohta PK-1	4-2.42x2.99	24-4000	55.1	6.50	IL	L	AA	HG	84.6	45.7	45.3	153.0	59.0	61.0	5.50/15	abce	1-Dt	Pu	HS	3	SB	6.83	Sp	N	H	2106
Toyopet Master RR	4-3.03x3.07	48-4000	88.5	6.80	IL	IH	AA	HG	99.6	51.9	53.9	168.3	65.8	61.0	6.00/16	abce	1-SD	Pu	HS	3	Hy	5.29	Sp	N	H	2530
Crown RS	4-3.03x3.07	48-4000	88.5	6.80	IL	IH	AA	HG	99.6	52.2	53.9	168.7	66.1	60.0	6.40/15	abce	1-SD	Pu	HS	3	Hy	5.29	Sp	Fr	H	2530
SPAIN																										
Pegaso 102B/2.8	8-3.14x2.76	—	—	Var	V	IH	AA	HG	92.0	52.0	50.8	162.0	63.0	51.0	6.00/16	abce	(10)	Pu	HS	5	SB	Var	Sp	Fr	H	2183
102BS/2.8	8-3.14x2.76	250-6600	171.5	Var	V	IH	AA	HG	92.0	52.0	50.8	162.0	63.0	51.0	6.50/16	abce	1-DH	Pu	HS	5	SB	Var	Sp	Fr	H	2340
102B/3.2	8-3.35x2.72	290-6000	193.9	Var	V	IH	AA	HG	92.0	52.0	50.8	162.0	63.0	51.0	6.50/16	abce	2-FH	Pu	HS	5	SB	Var	Sp	Fr	H	2183
102BS/3.2	8-3.35x2.72	370-6000	193.9	Var	V	IH	AA	HG	92.0	52.0	50.8	162.0	63.0	51.0	6.50/16	abce	4-DH	Pu	HS	5	SB	Var	Sp	Fr	H	2340
2-103	8-3.46x3.25	270-5800	244.7	8.00	V	IH	AA	Ch	92.2	52.8	50.8	162.0	63.0	50.8	6.30/28	abce	(18)	Pu	HS	5	SB	3.58	Fr	H	3190	
SWEDEN																										
SAAB 92B	2-3.15x2.99	28-4000	46.6	6.60	IL	N	AA	N	97.2	48.4	48.4	155.5	53.7	57.0	5.00/15	N	1-SD	TS	HS	3	HG	5.35	FR	H	1725	
93	3-2.60x2.88	38-5000	45.6	7.30	IL	N	AA	N	96.4	48.0	48.0	157.1	61.5	57.1	5.00/15	N	1-St		HS	3	HG	5.13	FR	H	1734	
Volvo PV-444-H	4-3.95x3.15	48-4500	88.0	7.30	IL	IH	AA	HG	102.3	51.0	51.8	177.0	62.0	62.0	5.90/15	abce	1-SD	Pu	HS	3	Hy	4.56	TA	Fr	H	2060
PV-445-DH	4-3.95x3.15	48-4500	88.0	7.30	IL	IH	AA	HG	102.3	51.0	51.8	174.0	62.0	66.0	6.00/15	abce	1-SD	Pu	HS	3	Hy	5.63	Sp	Fr	H	2270
B-14-A	4-3.95x3.15	70-5500	88.0	7.80	IL	IH	AA	HG	94.5	51.0	51.8	167.5	62.0	53.0	5.90/15	abce	2-SU	Pu	HS	3	Hy	4.56	TA	Fr	H	2060

ABBREVIATIONS

- 4—Four barrel carburetor optional.
- Front wheel drive.
- Mechanical or hydraulic.
- †—Alternate engine, transmission and rear axle available.
- (1)—Fully automatic, preselective or hand shift optional.
- (2)—One downdraft or one horizontal with supercharger.
- (3)—3.90 with std. trans. and 4.22 with overdrive.
- (4)—5.90 or 6.10/15.
- (5)—Front, 6.00/16; rear, 7.50/16.
- (6)—Front, 5.25/16; rear, 6.00/16.
- (7)—Front, 5.25/16; rear, 5.50/16.
- (8)—Front, 5.50/16; rear, 7.00/16.
- (9)—Front, 5.25/15; rear, 5.90/15.
- (10)—One or four dual downdrafts.
- (11)—Varies with different body styles.
- (12)—Front, 6.50/15; rear, 6.00/15.
- (13)—Front, 5.00/16; rear, 5.25/16.
- (14)—4.23, 4.38 or 4.86 available.

- (15)—Three optional gear ratios available.
- (16)—Front, 6.50/16; rear, 7.00/16.
- (17)—Front, 6.00/16; rear, 6.50/16.
- (18)—One dual downdraft or two four barrel.
- a—Main bearings.
- b—Connecting rod bearings.
- c—Camshaft bearings.
- d—Piston pins.
- e—Timing chain or gears.
- AA—Aluminum alloy.
- AG—Air cooled.
- AS—Aluminum alloy and steel strut.
- AT—Alloy tinplated.
- Au—Automatic.
- BG—Bevel gear.
- CC—Crankcase.
- CH—Chain and helical gear.
- DD—Dual downdraft.
- DF—Downdraft, four barrel.
- DH—Dual horizontal.
- DR—Downdraft.
- DR—Double reduction.
- DT—Dual throat.

- F—Valves in side and head.
- FB—Four barrel.
- Fr—Front.
- FR—Front and rear.
- H—Hydraulic.
- HG—Helical gear.
- HM—Front, hydraulic; rear, mechanical.
- HO—Horizontal.
- HO—Horizontally opposed.
- HS—Hand shift.
- Hy—Hypoid.
- IH—In head.
- Inj—Injectors.
- IL—In line.
- IL—In line.
- La—Valves at side.
- M—Mechanical.
- MH—Mechanical and hydraulic.
- N—No or none.
- NA—Not available.
- Pr—Preselective.
- Pu—Pump.
- RA—Radius arms.
- SB—Spiral bevel.
- SbH—Spiral bevel or hypoid.

- SbR—Straight bevel, double reduction.
- Sd—Semi-downdraft.
- SD—Single throat downdraft.
- SDR—Spiral bevel, double reduction.
- SG—Spur gear.
- SH—Single throat, horizontal.
- Sp—Springs.
- SSD—Single throat, semi-downdraft.
- St—Single throat.
- STB—Straight bevel.
- SU—Single throat, updraft.
- T—“T” head, valves opposite.
- TA—Torque arm.
- TaS—Torque arms and springs.
- TF—Torque forks.
- TP—Thermo-syphon and pump.
- TS—Thermo-syphon.
- TT—Torque tube.
- TTs—Torque tube and springs.
- V—“V” type.
- Var—Various.
- VS—Vertical shaft.
- Wo—Worm.



WHEEL TYPES

Line Number	TRACTOR MAKE AND MODEL	GENERAL				DRAW-BAR		OVERALL DIMENSIONS				WHEELS				HP. RATING		Travel Speeds at Normal Governed Engine R.P.M. (M.P.H.) with Standard Wheels									
		Wheelbase (In.)	Minimum Turning Radius Outside (Ft.)	Ground Clearance (In.)	Shipping Weight with Rubber Tires (Lb.)	TREAD (In.)		Lateral Adjustment (In.)	Height Above Ground (In.)	Length (In.)	Width (In.)	Height-To Highest Point (In.)	Standard Equipment	STEEL Diam. and Face		TIRE SIZE		Belt	Drawbar	Nebraska Test Number	Power Take-off	Number of Forward Speeds	Number of Reverse Speeds	First	Second	Third	
						Minimum	Maximum							Front (In.)	Rear (In.)	Front (In.)	Rear (In.)										
1	Allis-Chalmers 1B 57	7	12 1/2	2365	40 1/2	52 1/2		11 1/2	97	52 1/2	54 1/2	RT				5.00/15	9/24	22.87	18.00	Op	3	1	3.50	5.30	10.0		
2	..... B 73	7 1/4	21 3/4	2060	40 1/2	52 1/2		22 1/2	121	52 1/2	62 1/2	RT				4.00/15	9/24	22.87	19.51	302	Op	3	1	2.75	4.25	8.50	
3	..... CA 81	7 1/2	22 1/2	3000	52	60		14 1/4	124	67 1/2	76 1/2	RT				5.00/15	10/24	26.62	23.55	453	St	4	1	2.00	3.50	4.50	
4	..... G 68	6 1/2	17 1/2	1285	36	64		7 1/3	116	36 1/2	55 1/2	RT				4.00/12	6/30	10.91	9.99	398	St	4	1	1.60	2.26	3.57	
5	..... WD-45 88	8 1/2	28 1/2	4465	56	90		8 1/2	128	74	81 1/2	RT				5.50/16	12/20/28	45.27	40.01	499	St	4	1	2.40	3.75	5.00	
6	..... WD-45 88 1/2	8 1/2	29 1/2	4730	55 1/2	90 1/2		8 1/2	128	74	89	RT				5.50/16	12/20/28	45.42	40.42	563	St	4	1	2.40	3.78	5.03	
7	Brockway 49D 76	10 1/4	20	3600	48	76		28 1/2	16	115	63	62	RT				6.00/16	11/28	35.00	32.00		St	4	1	2.16	3.34	4.71
8	..... 49G 76	10 1/4	20	3600	48	76		28 1/2	16	115	63	62	RT				6.00/16	11/28	31.75	28.00		St	4	1	2.16	3.34	4.71
9	..... 49K 76	10 1/4	20	3600	48	76		28 1/2	16	115	63	62	RT				6.00/16	11/28	27.00	24.00		St	4	1	2.16	3.34	4.71
10	Case S 66	10 1/4	20	3600	48	76		28 1/2	16	115	63	62	RT				6.00/16	11/28	27.00	24.00		St	4	1	2.16	3.34	4.71
11	..... SC 82 1/2	Piv		44	80			17	16 1/2	133	74 1/2	56 1/2	Op	25x4	42x8		5.00/15	11/26			NT	Op	4	1	2.50	3.50	4.75
12	..... SI 65 1/2	12		48	11			N	15 1/2	110	61 1/2	51 1/2	Op	24 1/2x4	18x12 1/2		5.00/16	12/20/24			367	Op	4	1	2.50	3.50	4.75
13	..... LA 82	13		59 1/2				33 1/2	15	140	72 1/2	61 1/2	Op	30x6	48x12		7.50/18	14/30			480	Op	4	1	2.50	3.33	4.33
14	..... VAC-14 77			48	88			16	15 1/2	114 1/2	80 1/2	58	RT				5.00/15	11/28				Op	4	1	2.25	3.00	4.00
15	500 Diesel 87 1/2			53 1/2	64			26 1/2	13	144 1/2	76 1/2	61 1/2	RT				7.50/18	14/30			508	Op	4	1	2.61	3.58	4.76
16	..... 400 82	10 1/4	17 1/2	52	64			20 1/2	17	133	66 1/2	89	RT				6.00/16	13/30			NT	Op	8	2	1.30	1.80	2.50
17	..... 410 82	10 1/4	17 1/2	52	64			20 1/2	17	133	66 1/2	89	RT				6.00/16	13/30			NT	Op	8	2	1.30	1.80	2.50
18	..... 401 91 1/2	8 1/2		52	108			20 1/2	20 1/2	133	85 1/2	93 1/2	RT				6.00/16	12/38			NT	Op	8	2	1.30	1.90	2.60
19	..... 411 91 1/2	8 1/2		52	108			20 1/2	20 1/2	133	85 1/2	93 1/2	RT				6.00/16	12/38			NT	Op	8	2	1.30	1.90	2.60
20	Cockshutt 20 79	7 1/4	24 1/2	2050	48	76		19 1/2	12 1/2	114	63	76	RT				5.00/15	10/24	30.45	26.74	474	Op	4	1	2.31	3.50	5.00
21	..... Rowcrop 30 84 1/2	8 1/2	23	3800	56	84		21 1/2	13	127	74 1/2	76	RT				5.50/16	10/38	32.95	28.43	382	Op	4	1	3.12	4.50	6.25
22	..... 40 89 1/2	12	26	5000	56	84		23 1/2	14 1/2	134	75 1/2	79 1/2	RT				6.00/16	12/38	45.59	40.06	412	Op	6	2	1.62	2.75	3.62
23	..... 50C 89 1/2	12	26	5860	56	84		23 1/2	14 1/2	134	75 1/2	79 1/2	RT				7.50/16	14/34	57.81	51.51	488	Op	6	2	1.52	2.57	3.53
24	..... 50D 89 1/2	12	26	5860	56	84		23 1/2	14 1/2	134	75 1/2	79 1/2	RT				7.50/16	14/34	53.25	47.16	487	Op	6	2	1.52	2.57	3.53
25	..... D4 89 1/2	12	26	62	62	23 1/2		23 1/2	14 1/2	134	75 1/2	79 1/2	RT				6.00/16	12/38				Op	6	2	1.62	2.75	3.62
26	35 DeLuxe 89 1/2	12	26	5000	58	23 1/2		23 1/2	14 1/2	134	75 1/2	79 1/2	RT				6.00/16	11/38				Op	6	2	1.12	2.75	3.62
27	Deere, John 50 90	8 1/2	24	4435	56	88		8 1/2	15	132 1/2	86 1/2	82 1/2	RT				5.50/16	11/38	30.97	27.49	(i)	(f)	6	1	1.50	2.50	3.50
28	..... 60 90	8 1/2	26	5300	56	88		8 1/2	15	132 1/2	86 1/2	84 1/2	RT				6.00/16	12/38	41.57	38.94	(k)	(f)	6	1	1.50	2.50	3.50
29	..... 60 Standard 80 1/2	13 1/2	24 1/2	5347	58	62		27	12 1/2	125 1/2	70 1/2	74 1/2	RT				6.00/16	14/30			(m)	(f)	6	1	1.50	2.50	2.75
30	..... 60 Orchard 75 1/2	13 1/2	21 1/2	5332	54 1/2	58 1/2		27	12 1/2	125 1/2	71 1/2	57	RT				6.00/16	14/26			(n)	(f)	6	1	1.50	2.75	3.25
31	..... 60 Hi-Crop 98 1/2	16 1/2	30 1/2	6885	60	90		21	14 1/2	98 1/2	102	152 1/2	RT				7.50/20	11/38			(n)	(f)	6	1	1.50	2.25	3.50
32	..... 70 91	9 1/2	25 1/2	5945	60	88		8 1/2	16 1/2	136 1/2	86 1/2	88 1/2	RT				6.00/16	12/38	50.35	44.21	(n)	(f)	6	1	2.50	3.50	4.50
33	..... Diesel 70 91	9 1/2	25 1/2	6510	60	88		8 1/2	16 1/2	136 1/2	86 1/2	88 1/2	RT				6.00/16	12/38			528	(f)	6	1	2.50	3.50	4.50
34	..... 70 91	9 1/2	25 1/2	5945	60	88		8 1/2	16 1/2	136 1/2	86 1/2	88 1/2	RT				6.00/16	12/38			506	(f)	6	1	2.50	3.50	4.50
35	..... 70 Standard 82	14 1/2	25 1/2	6815	62	80		8 1/2	14 1/2	129	86 1/2	129	RT				6.50/18	15/30			493	(f)	6	1	2.50	3.50	4.50
36	..... 70 Standard 82	14 1/2	25 1/2	6815	62	80		8 1/2	14 1/2	129	86 1/2	129	RT				6.50/18	15/30			528	(f)	6	1	2.50	3.50	4.50
37	..... Diesel 70 Stand. 82	14 1/2	25 1/2	7140	62	80		8 1/2	14 1/2	129	86 1/2	129	RT				6.50/18	15/30			514	(f)	6	1	2.50	3.50	4.50
38	..... 70 Standard 82	14 1/2	25 1/2	6815	62	80		8 1/2	14 1/2	129	86 1/2	129	RT				6.50/18	15/30			506	(f)	6	1	2.50	3.50	4.50
39	..... 70 Hi-Crop 98 1/2	16 1/2	30 1/2	7410	60	90		14 1/2	15 1/2	77 1/2	101	101	RT				6.00/16	12/38			506	(f)	6	1	2.50	3.50	4.50
40	..... M 70	8 1/2	21	2750	38	52		15 1/2	16	110	51	56	RT				5.00/15	9/24	21.42	19.19	387	St	4	1	1.62	3.12	4.25
41	..... MT 82 1/2	8 1/2	21	48	96	15 1/2		15 1/2	16 1/2	125 1/2	89 1/2	73 1/2	RT				5.00/15	9/34	21.57	18.77		St	4	1	1.62	3.12	4.25
42	..... MI 82	8 1/2	21	48	96	15 1/2		13 1/2	11	110	62	58 1/2	RT				5.00/15	9/24	21.42	19.19		St	4	1	1.62	3.12	4.25
43	..... 80 85 1/2	15 1/2	18 1/2	7750	64 1/2	68 1/2		35 1/2	20 1/2	142 1/2	86	81	RT				7.50/18	15/34	67.64	61.76	567	Op	6	1	1.63	3.13	4.25
44	..... 40 82 1/2	8 1/2	21	3000	48	56		10 1/2	14 1/2	130	88 1/2	72 1/2	RT				5.00/15	9/24	25.23	22.88	503	St	4	1	1.53	3.16	4.37
45	..... 40-S 70 1/2	8 1/2	21	2880	38 1/2	54 1/2		25 1/2	12 1/2	115 1/2	55 1/2	70	RT				5.00/15	10/24	24.86	22.36	504	St	4	1	1.59	3.33	4.66
46	..... 40-U 77 1/2	9	11	2600	41	56 1/2		6 1/2	11 1/2	125 1/2	55 1/2	64 1/2	RT				5.00/15	10/24				Op	4	1			
47	..... 40-H 80 1/2	32 1/2		3400	54	84		12	(f)	132	95 1/2	86	RT				6.50/16	10/38			NT	Op	4	1	1.63	3.13	4.25
48	..... 420-S 70	8 1/2	21	2750	38 1/2	54 1/2		25 1/2	(f)	114 1/2	55 1/2	73 1/2	RT				5.00/15	9/24			NT	St	4				

1956

TRACTORS

WHEEL TYPES

Travel Speeds at Normal Governed Engine R.P.M. with Standard Wheels				ENGINE		FUEL		BELT PULLEY		CAPACITIES																							
Fourth	Fifth	Sixth	Reverse	Make and Model	Number of Cylinders Bore and Stroke (In.)	Piston Diam. (Cu. In.)	R.P.M. at Governed Speed	Valve Arrangement	Number of Main Bearings	Diameter of Main Bearings	Standard	Optional	Ignition—Make	Carburetor or Injector Pump—Make	Air Cleaner—Make	Governor—Make	Oiling System—Type	Cooling System—Type	Clutch—Make and Type	Final Drive—Type	Diameter (In.)	Face (In.)	Normal R.P.M.	Steering Type	Cooling System (Gal.)	Fuel Tank (Gal.)	Crankcase (Qts.)	Transmission (Qts.)	Final Drive Case (Qts.)	Starting Method	Line Number		
11.25				3.80 Own	18 4-3/4x3	125	1500	I	3	2 1/4	G	D	FM	Zen	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	7	4	Ele	2	
6.91				3.00 Own	GE 4-3/4x3	125	1650	I	3	2 1/4	G	D	FM	Zen	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	3	
11.25				1.96 Cont	6E2 4-3/4x3	125	1650	I	3	2 1/4	G	D	DR	Zen	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	4	
11.18				3.00 Own	WD 4-4x4	226	1400	I	3	2 1/4	G	D	DR	Zen	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	5	
12.00				3.17 Bu	6-3 3/4x4	230	1625	I	7	2 1/4	O			Bu	Uni	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	6	
5.00				1.22 Cont	GD157 4-3/4x4	157	2000	I	3	2 1/4	O			AL	Bos	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	7
15.00				1.69 Cont	F162 4-3/4x4	162	2400	I	3	2 1/4	O			AL	Bos	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	8
10.00				1.69 Cont	F162 4-3/4x4	162	2400	I	3	2 1/4	K			AL	Bos	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	9
10.00				2.75 Own	5 4-3/4x4	165	1600	I	3	2 1/4	K			AL	Bos	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	10
10.00				2.75 Own	5 4-3/4x4	165	1600	I	3	2 1/4	K			AL	Bos	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	11
10.00				2.82 Own	5 4-3/4x4	165	1600	I	3	2 1/4	K			AL	Bos	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	12
12.00				3.25 Own	LA 4-4x6	403	1100	I	3	2 1/4	G	D		Own	Zen	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	13
9.89				2.87 Own	VA 4-3x3	124	1425	I	3	2 1/4	G	D		Own	Zen	Don	Own	P	Pu	Rec.	SP	SG	8	5 1/2	1130	FK	2	13	4	8	11 1/2	Ele	14
3.70	4.60	AA	AA	2.87 Own	50-4x5	377	1350	I	7	3	O			Bos	Don	Own	P	Pu	Own	SP	SG	10 1/2	6 1/2	956	FA	15	31	12	68	48	15	Ele	15
3.70	4.60	AA	AA	Own	4-4x5	251	1450	I	5	5				AL	Bos	Don	Own	P	Pu	Own	SP	SG	10 1/2	7 1/4	1128	FK	7 1/2	21	9	60		Ele	16
3.70	4.60	AA	AA	Own	4-4x5	251	1450	I	5	5				AL	Bos	Don	Own	P	Pu	Own	SP	SG	10 1/2	7 1/4	1128	FK	7 1/2	21	9	60		Ele	17
3.70	4.70	++	++	Own	4-4x5	251	1450	I	5	5				AL	Bos	Don	Own	P	Pu	Own	SP	SG	10 1/2	7 1/4	1128	FK	7 1/2	21	9	60		Ele	18
12.50				3.00 Cont	F140 4-3 1/4x4 1/2	140	1800	I	3	2 1/4	G	D	D.L.P	AL	Bos	Don	Own	P	Pu	Own	SP	SG	10 1/2	7 1/4	1128	FK	7 1/2	21	9	60		Ele	19
13.50				4.00 Bu	4B153 4-3 1/4x4 1/2	153	1650	I	3	2 1/4	G	D	D.O.L.P	AL	Bos	Don	Own	P	Pu	BB	SP	SG	10 1/2	6 1/2	1160	SF	3 1/2	12	4	8	11 1/2	Ele	20
4.50	6.25	10.50		(e) Bu	6B273 6-3 1/4x4 1/2	229	1650	I	7	2 1/4	G	D	D.O.L.P	AL	Bos	Don	Own	P	Pu	BB	SP	SG	12 1/2	7 1/2	1000	SF	3 1/2	15	5	20		Ele	21
4.32	5.95	9.85		(e) Bu	6B273 6-3 1/4x4 1/2	229	1650	I	7	2 1/4	G	D	D.O.L.P	AL	Bos	Don	Own	P	Pu	BB	SP	SG	12 1/2	7 1/2	1000	SF	3 1/2	15	5	20		Ele	22
4.32	5.95	9.85		(e) Bu	6DA273 6-3 1/4x4 1/2	273	1650	I	7	2 1/4	G	D	D.O.L.P	AL	Bos	Don	Own	P	Pu	BB	SP	SG	12 1/2	8 1/2	1000	DFS	4 1/2	21	6	40		Ele	23
4.50	6.25	10.50		(e) Per	LA 4-4x4	269	1650	I	3	2 1/4	O			AL	Bos	Don	Own	P	Pu	BB	SP	SG	12 1/2	8 1/2	1000	DFS	4 1/2	21	6	40		Ele	24
4.50	6.25	10.50		(e) Own	4-4x4	198	1650	I	3	2 1/4	O			AL	Bos	Don	Own	P	Pu	BB	SP	SG	12 1/2	8 1/2	1000	DFS	4 1/2	21	6	40		Ele	25
4.50	6.25	10.50		(e) Own	50-4x5	190	1250	I	2	2 1/4	G	D	K.D.L.P	DR	Mar	Don	Own	P	Pu	Own	MD	SG	9 1/2	7 1/2	1250	FK	4 1/2	15	7	20		Ele	26
4.50	6.25	11.00		3.00 Own	80-5 1/2x6 1/2	321	975	I	2	2 1/4	G	D	K.D.L.P	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	20	8	28		Ele	27
4.50	6.50	11.50		3.00 Own	80-5 1/2x6 1/2	321	975	I	2	2 1/4	G	D	K.D.L.P	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	20	8	28		Ele	28
4.50	6.50	11.25		2.75 Own	80-5 1/2x6 1/2	321	975	I	2	2 1/4	G	D	K.D.L.P	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	20	8	28		Ele	29
4.50	6.25	11.00		3.00 Own	80-5 1/2x6 1/2	321	975	I	2	2 1/4	G	D	K.D.L.P	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	20	8	28		Ele	30
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	31
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	32
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	33
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	34
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	35
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	36
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	37
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	38
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	39
6.50	8.75	12.50		3.25 Own	70-2 1/2x7	380	975	I	2	3 1/4	G	D	LP	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	40
10.00				1.62 Own	M 2-4x4	101	1650	I	2	2 1/4	G	D	K.D.L.P	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	41
10.00				1.62 Own	M 2-4x4	101	1650	I	2	2 1/4	G	D	K.D.L.P	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	42
10.00				1.62 Own	M 2-4x4	101	1650	I	2	2 1/4	G	D	K.D.L.P	DR	Mar	Don	Own	P	Pu	Own	MD	SG	12 1/2	7 1/2	975	FA	8 1/2	24	11	30		Ele	43
5.30	6.75	12.25		2.67 Own	80-2 1/2x8	472	1125	I	3	4	O			DR	B-S	Don	Own	P	Pu	Own	MD	SG	12 1/2	9	1125	DA	8 1/2	32	13	13		Ele	44
11.24				2.50 Own	40-2 1/4x4	101	1650	I	2	2 1/4	G	D	D	DR	Mar	Don	Own	P	Pu	Own	MD	SG	9 1/2	6 1/2	1267	FK	3 1/2	10	5	7 1/2	11 1/2	Ele	45
11.95				2.50 Own	40-2 1/4x4	101	1650	I	2	2 1/4	G	D	D	DR	Mar	Don	Own	P	Pu	Own	MD	SG	9 1/2	6 1/2	1267	FK	3 1/2	10	5	7 1/2	11 1/2	Ele	46
12.00				2.50 Own	420-2 1/4x4	113	1850	I	2	2 1/4	G	D	TF	DR	Mar	Don	Own	P	Pu	Own	MD	SG	9 1/2	6 1/2	1270	DA	2 1/2	10	5	6 1/2	11 1/2	Ele	47
12.00				2.50 Own	420-2 1/4x4	113	1850	I	2	2 1/4	G	D	TF	DR	Mar	Don	Own	P	Pu	Own	MD	SG	9 1/2	6 1/2	1270	DA	2 1/2	10	5	6 1/2	11 1/2	Ele	48
12.00				2.50 Own	420-2 1/4x4	113	1850	I	2	2 1/4	G	D	TF	DR	Mar	Don	Own	P	Pu	Own	MD	SG	9 1/2	6 1/2	1270	DA	2 1/2	10	5	6 1/2	11 1/2	Ele	49
12.00				2.50 Own	420-2 1/4x4	113	1850	I	2	2 1/4	G	D	TF	DR	Mar	Don	Own	P	Pu	Own	MD	SG	9 1/2	6 1/2	1270	DA	2 1/2	10	5	6 1/2	11 1/2	Ele	50
12.00				2.50 Own	420-2 1/4x4	113	1850																										

For references and abbreviations see pages 82 and 83

TRACTORS

1956 MODELS OF TRACTORS

Line Number	TRACTOR MAKE AND MODEL	GENERAL				DRAW-BAR		OVERALL DIMENSIONS				WHEELS				HP. RATING		Travel Speeds at Normal Governed Engine R.P.M. (M.P.H.) with Standard Wheels										
		Wheelbase (in.)	Minimum Turning Radius Outside (ft.)	Ground Clearance (in.)	Shipping Weight with Rubber Tires (Lb.)	TREAD (in.)		Lateral Adjustment (in.)	Height Above Ground (in.)	Length (in.)	Width (in.)	Height To Highest Point (in.)	Standard Equipment	STEEL Diam. and Face		TIRE SIZE		Belt	Drawbar	Nebraska Test Number	Power Take-off	Number of Forward Speeds	Number of Reverse Speeds	First	Second	Third		
						Minimum	Maximum							Front (in.)	Rear (in.)	Front (in.)	Rear (in.)											
1	Massey-Harris (Cont'd)																											
2	Mustang HA 87	113 1/2	13 1/2	52	88 1/2	18 1/2	7 1/2	128	70 1/2	NA	RT	RT	28x4 1/2	48x12	5.00/15	11/28	31.59	23.91	483	Op	4	1	1	2.43	3.42	4.26		
3	33 Std. 88 1/2	123 1/2	12 1/2	54 1/2	88 1/2	19 1/2	11 1/2	135 1/2	66 1/2	75	RT	RT	22x4	54x1 1/2	5.50/16	12/28	40.43	37.31	509	Op	5	1	1	2.67	3.73	4.66		
4	33 RT 88	9	15 1/2	52 1/2	88 1/2	19 1/2	11 1/2	135 1/2	79	80 1/2	RT	RT			5.50/16	11/38	40.43	37.31	509	Op	5	1	1	2.67	3.73	4.66		
5	33 RS 88 1/2	9	15 1/2	52 1/2	88 1/2	19 1/2	11 1/2	135 1/2	79	80 1/2	RT	RT			9.00/10	11/38	40.43	37.31	509	Op	5	1	1	2.67	3.73	4.66		
6	33 HA 100	133 1/2	15 1/2	52 1/2	88 1/2	19 1/2	11 1/2	147 1/2	79	80 1/2	RT	RT	26x4 1/2	54x1 1/2	5.50/16	11/38	40.43	37.31	509	Op	5	1	1	2.67	3.73	4.66		
7	55 Std. 88 1/2	12	12 1/2	57 1/2	23 1/2	15 1/2	145 1/2	72 1/2	83 1/2	RT	RT	30x5 1/2	54x12	7.50/18	14/34	68.20	60.45	455	On	4	1	1	2.96	4.22	5.22			
8	50 Std. 81 1/2	8	12 1/2	2930	48	76	17 1/2	Ad	120	63 1/2	57	RT			5.50/16	11/28				NT	St	6	2	1.33	1.99	3.65		
9	50 Hi Clearance 81 1/2	8	18 1/2	3110	48	82	17 1/2	Ad	124 1/2	63 1/2	63 1/2	RT			5.50/16	10/38				NT	St	6	2	1.45	2.18	3.99		
10	50 Row Crop 84 1/2	8	18 1/2	2995	48	76	17 1/2	Ad	127 1/2	63 1/2	63 1/2	RT			5.50/16	10/38				NT	St	6	2	1.45	2.18	3.99		
11	50 Tricycle 85 1/2	8	18 1/2	3005	48	76	17 1/2	Ad	127 1/2	63 1/2	63 1/2	RT			7.50/10	10/38				NT	St	6	2	1.45	2.18	3.99		
12	McCormick S. WD-9 83			6630	52	66	18 1/2	Ad	134	76	82	Op			7.50/18	14/34				518	On	5	1	2.40	3.20	4.50		
13	Super WDR-9 83			7030	52	66	18 1/2	Ad	140	81 1/2	83	Op			7.50/18	15/34				NT	Op	5	1	2.50	3.40	4.80		
14	WR-9S 83			6700	52	66	18 1/2	Ad	140	81 1/2	83	Op			7.50/18	15/34				NT	Op	5	1	2.50	3.40	4.80		
15	McCormick Frm. Cub 69	20 1/2		1590	40	56	23	Ad	99	48 1/2	76	RT			4.00/12	8/24				386	On	3	1	2.40	3.20	4.50		
16	100 71	22		2710	40	70	19	Ad	107	56 1/2	82	RT			5.00/15	9/24				NT	Op	4	1	2.30	3.70	4.80		
17	100 HC 71	27		2860	44	68	19	Ad	115	60 1/2	88	RT			4.00/19	9/36				NT	Op	4	1	3.00	4.80	6.40		
18	200 82	23 1/2		3310	61 1/2	100	23 1/2	Ad	123	80 1/2	95	RT			5.00/15	10/36				NT	Op	4	1	2.40	3.90	5.10		
19	300 92	19		5050	8	105	26	Ad	136	75 1/2	85	Op			5.50/16	11/38				NT	Op	5	1	2.50	3.82	5.15		
20	300 HC 94	30		5500	60	84	30	Ad	149	86 1/2	93	RT			6.00/20	11/38				NT	Op	5	1	2.40	3.67	4.96		
21	400 96	22 1/2		6220	81 1/2	106	26	Ad	141	84 1/2	95	Op			6.00/16	12/38				NT	Op	5	1	2.50	3.85	4.82		
22	400 D 96	22 1/2		6640	81 1/2	106	26	Ad	141	84 1/2	94	Op			6.00/16	12/38				NT	Op	5	1	2.50	3.85	4.82		
23	400 HC 101	34		6580	60	84	30	Ad	155	86 1/2	107	RT			6.00/20	13/38				NT	Op	5	1	2.52	3.88	4.87		
24	400 DHC 101	34		6990	60	84	30	Ad	155	86 1/2	106	RT			6.00/20	13/38				NT	Op	5	1	2.52	3.88	4.87		
25	Minneapolis-Moline																											
26	UTS 80	12	18	5200	50 1/2	62 1/2	22	14 1/2	130 1/2	71	72	RT			6.00/16	12/38				50.38	45.43	NT	Op	5	1	2.60	3.80	4.20
27	GB 82 1/2	14	14 1/2	6000	56	66	25	18 1/2	137 1/2	85	72 1/2	RT			7.50/18	15/34				70.00	61.00	NT	Op	5	1	2.70	3.80	4.40
28	GBD 96 1/2	16 1/2	14 1/2	7400	66	66	25	18 1/2	151 1/2	85	72 1/2	RT			7.50/18	15/34				64.00	56.00	NT	Op	5	1	2.70	3.80	4.40
29	ZAS 72 1/2	12	12 1/2	3750	48	59	11 1/2	14 1/2	121 1/2	66	69	RT			5.50/16	11/38				37.48	33.38	NT	Op	5	1	2.40	3.60	4.80
30	UTS Diesel 80	12	16	5350	57	62 1/2	22	14 1/2	130 1/2	71	72	RT			6.00/16	12/38				45.00	40.00	NT	Op	5	1	2.60	3.60	4.20
31	UBUD Special 88	8 1/2	25	5500	54 1/2	84 1/2	22	14 1/2	133	83	78 1/2	RT			6.00/16	12/38				45.00	40.00	NT	Op	5	1	2.60	3.60	4.20
32	Industrial UTIL 87 1/2	17	17 1/2	6310	66 1/2	70 1/2	22	14 1/2	136	84 1/2	74 1/2	RT			8.25/20	15/26				50.38	45.43	NT	Op	5	1	2.40	3.50	4.00
33	Industrial UTI 79 1/2	16	17 1/2	6010	68 1/2	70 1/2	22	14 1/2	127 1/2	84 1/2	74 1/2	RT			8.25/20	15/26				50.38	45.43	NT	Op	5	1	2.40	3.50	4.00
34	UBUS Special 87 1/2	8 1/2	25	5250	54 1/2	84 1/2	22	14 1/2	133	83	79	RT			6.00/16	12/38				50.38	45.43	520	Op	5	1	2.60	3.80	4.20
35	UBE Special 96 1/2	10 1/2	20	5500	54 1/2	84 1/2	22	14 1/2	141	83	79	RT			6.00/16	12/38				45.00	40.00	NT	Op	5	1	2.60	3.60	4.20
36	UBN Special 87 1/2	8 1/2	25	5500	54 1/2	84 1/2	22	14 1/2	133	83	79	RT			9.00/10	12/38				45.00	40.00	NT	Op	5	1	2.60	3.80	4.20
37	ZBU 82	8	25	3700	54	98	18 1/2	14 1/2	126 1/2	83	74	RT			5.50/16	11/38				37.48	33.38	NT	Op	5	1	2.40	3.60	4.60
38	ZBE 90 1/2	8	19 1/2	3900	54	98	18 1/2	14 1/2	134 1/2	83	74	RT			5.50/16	11/38				37.48	33.38	NT	Op	5	1	2.40	3.60	4.60
39	ZBN 82 1/2	8	25	3750	54	98	18 1/2	14 1/2	124 1/2	81	74	RT			7.50/18	11/38				37.48	33.38	NT	Op	5	1	2.40	3.60	4.60
40	BF 79	7 1/2	26	2900	52	76	20	16 1/2	116	63	76	RT			5.00/15	10/28				27.60	25.10	469	On	4	1	2.40	3.70	5.20
41	BG 75	9	20 1/2	2880	40	68	20	14 1/2	110	55 1/2	76	RT			5.00/15	11/24				27.60	25.10	NT	Op	4	1	2.30	3.50	4.80
42	445 Utility 81 1/2	NA	25 1/2	3750	56	84	23	7	120 1/2	68	60 1/2	RT			5.50/16	11/28				45.00	40.00	NT	Op	5	1	2.61	3.99	6.08
43	445 Type N 86 1/2	NA	25 1/2	3750	56	86	21	11	128 1/2	60 1/2	67 1/2	RT			7.50/18	11/38				45.00	40.00	NT	Op	5	1	2.78	4.26	6.48
44	445 Type U 86 1/2	NA	25 1/2	3700	56	88	21	11	130 1/2	82 1/2	67 1/2	RT			5.50/16	11/38				45.00	40.00	NT	Op	5	1	2.78	4.26	6.48
45	445 Type E 83 1/2	NA	22 1/2	3900	58	88	21	11	137 1/2	82 1/2	65	RT			5.50/16	11/38				45.00	40.00	NT	Op	5	1	2.78	4.26	6.48
46	UTIL-D 87 1/2	17	17 1/2	6500	66 1/2	70 1/2	22	14 1/2	136	84 1/2	74 1/2	RT			8.25/20	15/26				45.00	40.00	NT	Op	5	1	2.40	3.50	4.00
47	Oliver Super 55 HC 73 1/2	10	14 1/2	3050	48	76	20 1/2	Ad	120	66 1/2	53 1/2	RT			5.50/16	10/28				35.88	30.75	524	Op	6	2	1.47	2.26	3.03
48	Super 55 D 73 1/2	10	14 1/2	3200	48	76	20 1/2	Ad	120	66 1/2	53 1/2	RT			5.50/16	10/28				34.09	28.97	526	Op	6	2	1.47	2.26	3.03
49	RC Super 66 HC 88 1/2	8 1/2	18 1/2	2880	60	88	20 1/2	Ad	134 1/2	80 1/2	73 1/2	RT			5.50/15	9/38				35.54	29.60	541	Op	6	2	1.88	2.72	3.25
50	RC Super 66 D 88 1/2	8 1/2	18 1/2	3020	60	88	20 1/2	Ad	134 1/2	8																		

WHEEL TYPE—concluded

Travel Speeds at Normal Governed Engine R.P.M. with Standard Wheels				ENGINE										FUEL										BELT PULLEY		CAPACITIES											
Fourth	Fifth	Sixth	Reverse	Make and Model	Number of Cylinders—Bore and Stroke (In.)	Platen Disp. (Cu. In.)	R.P.M. at Governed Speed	Valve Arrangement	Number of Main Bearings	Diameter of Main Bearings	Standard	Optional	Ignition—Make	Carburetor or Injector Pump—Make	Air Cleaner—Make	Governor—Make	Oiling System—Type	Cooling System—Type	Clutch—Make and Type	Final Drive—Type	Diameter (In.)	Face (In.)	Normal R.P.M.	Steering Type	Cooling System (Gal.)	Fuel Tank (Gal.)	Crankcase (Qtz.)	Transmission (Qtz.)	Final Drive Case (Qtz.)	Starting Method	Line Number						
5.95 11.94			2.76	Cont. F140 4-3 1/2 x 4 1/2	140 1500 L	3	2 1/2	G	D	AL	Mar	Don	Novi	P	Pu	BB	SP	SG	9 1/2 6 1/2	3044 WS	13	13	4	8	13 1/2	Ele	1					1					
6.53 13.08			3.03	Ow. E201 4-3 1/2 x 4 1/2	201 1500 L	3	2 1/2	G	D.O	AL	Mar	Don	Ow	P	Pu	BB	SP	SG	13 1/2 6 1/2	3148 WS	18	18	7	48	11	Ele	2					2					
				Ow. E201 4-3 1/2 x 4 1/2	201 1500 L	3	2 1/2	G	D.O	AL	Mar	Don	Ow	P	Pu	BB	SP	SG	13 1/2 6 1/2	3148 WS	18	18	7	48	11	Ele	3					3					
				Ow. E201 4-3 1/2 x 4 1/2	201 1500 L	3	2 1/2	G	D.O	AL	Mar	Don	Ow	P	Pu	BB	SP	SG	13 1/2 6 1/2	3148 WS	18	18	7	48	11	Ele	4					4					
12.07			2.54	Ow. E201 4-3 1/2 x 4 1/2	201 1500 L	3	2 1/2	G	D.O	AL	Mar	Don	Ow	P	Pu	BB	SP	SG	13 1/2 6 1/2	3148 WS	18	18	7	48	11	Ele	5					5					
5.30 7.96 14.59				Ow. J382 4-3 1/2 x 4 1/2	382 1350 L	3	2 1/2	G	D.L.P.O	AL	Mar	Don	Ow	P	Pu	BB	SP	SG	10 6 1/2	3059 CL	28	27 1/2	5	68	11	Ele	6					6					
5.80 8.71 15.98				Cont. Z134 4-3 1/2 x 3 1/2	134 2000 L	3	2 1/2	G	D	M-C	Don	Novi	P	Pu	Au	SP	SB	9 6 1/2	1358 FK	2 1/2	17	5	32	11	Ele	7					7						
5.80 8.71 15.98				Cont. Z134 4-3 1/2 x 3 1/2	134 2000 L	3	2 1/2	G	D	M-C	Don	Novi	P	Pu	Au	SP	SB	9 6 1/2	1358 FK	2 1/2	17	5	32	11	Ele	8					8						
5.80 8.71 15.98				Cont. Z134 4-3 1/2 x 3 1/2	134 2000 L	3	2 1/2	G	D	M-C	Don	Novi	P	Pu	Au	SP	SB	9 6 1/2	1358 FK	2 1/2	17	5	32	11	Ele	9					9						
5.50 15.80			2.90	Ow. D350 4-4 1/2 x 5 1/2	350 1500 L	5	3	O	N	N	Ow	Don	Ow	P	Pu	BB	SP	SG	14 8 1/2	707 CL	9 1/2	35	11	40	11	Ele	10					10					
5.80 16.70			3.10	Ow. D350 4-4 1/2 x 5 1/2	350 1500 L	5	3	O	N	N	Ow	Don	Ow	P	Pu	BB	SP	SG	14 8 1/2	707 CL	9 1/2	35	11	40	11	Ele	11					11					
5.80 16.70			3.10	Ow. D350 4-4 1/2 x 5 1/2	350 1500 L	5	3	O	N	N	Ow	Don	Ow	P	Pu	BB	SP	SG	14 8 1/2	707 CL	9 1/2	35	11	40	11	Ele	12					12					
10.00			2.90	Ow. C123 4-3 1/2 x 4 1/2	123 1400 L	3	2 1/2	G	D.K	CMZ	Don	Ow	Ow	P	Pu	BB	SP	SG	14 8 1/2	707 CL	9 1/2	35	11	40	11	Ele	13					13					
13.20			3.80	Ow. C123 4-3 1/2 x 4 1/2	123 1400 L	3	2 1/2	G	D.K	CMZ	Don	Ow	Ow	P	Pu	BB	SP	SG	14 8 1/2	707 CL	9 1/2	35	11	40	11	Ele	14					14					
10.70			3.10	Ow. C123 4-3 1/2 x 4 1/2	123 1400 L	3	2 1/2	G	D.K	CMZ	Don	Ow	Ow	P	Pu	BB	SP	SG	14 8 1/2	707 CL	9 1/2	35	11	40	11	Ele	15					15					
6.60 16.11			3.12	Ow. C189 4-4 1/2 x 5 1/2	189 1750 L	3	2 1/2	G	D.K	Ow	Don	Ow	Ow	P	Pu	BB	SP	SG	9 7 1/2	1081 WG	4 1/2	17	6	28	11	Ele	16					16					
6.35 15.49			3.00	Ow. C189 4-4 1/2 x 5 1/2	189 1750 L	3	2 1/2	G	D.K	Ow	Don	Ow	Ow	P	Pu	BB	SP	SG	9 7 1/2	1081 WG	4 1/2	17	6	28	11	Ele	17					17					
6.71 16.70			3.33	Ow. C264 4-4 1/2 x 5 1/2	264 1450 L	3	2 1/2	G	D.K	Ow	Don	Ow	Ow	P	Pu	BB	SP	SG	11 7 1/2	899 WG	6 1/2	18	8	48	11	Ele	18					18					
6.71 16.70			3.33	Ow. C264 4-4 1/2 x 5 1/2	264 1450 L	3	2 1/2	G	D.K	Ow	Don	Ow	Ow	P	Pu	BB	SP	SG	11 7 1/2	899 WG	6 1/2	18	8	48	11	Ele	19					19					
6.77 16.84			3.36	Ow. C264 4-4 1/2 x 5 1/2	264 1450 L	3	2 1/2	G	N	O	Ow	Don	Ow	Ow	P	CH	11 7 1/2	899 WG	6 1/2	18	8	48	11	Ele	20					20							
6.77 16.84			3.36	Ow. C264 4-4 1/2 x 5 1/2	264 1450 L	3	2 1/2	G	N	O	Ow	Don	Ow	Ow	P	CH	11 7 1/2	899 WG	6 1/2	18	8	48	11	Ele	21					21							
6.10 14.10			2.00	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	22					22					
6.30 14.70			2.10	Ow. D403 6-4 1/2 x 5 1/2	403 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	MD	SG	16 7	741 FK	12	29	9	52	11	Ele	23					23					
6.30 14.70			2.10	Ow. D425 6-4 1/2 x 5 1/2	426 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	MD	SG	16 7	741 FK	12	29	9	52	11	Ele	24					24					
6.30 14.70			2.20	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	15 7	786 FK	3 1/2	19	7	28	11	Ele	25					25					
6.10 14.10			2.00	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	26					26					
6.10 14.10			2.00	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	27					27					
5.80 13.50			1.80	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	28					28					
5.80 13.50			1.80	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	29					29					
5.80 13.50			1.80	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	30					30					
6.10 14.10			2.00	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	31					31					
6.10 14.10			2.00	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	32					32					
6.10 14.10			2.00	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	33					33					
6.30 13.10			2.20	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	34					34					
6.30 13.10			2.20	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	35					35					
6.30 13.10			2.20	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	36					36					
6.30 13.10			2.20	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	37					37					
13.00			2.80	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	38					38					
12.50			2.70	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	39					39					
9.42 14.44			3.98	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	40					40					
10.05 15.40			4.28	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	41					41					
10.05 15.40			4.28	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	42					42					
10.05 15.40			4.28	Ow. D283 4-4 1/2 x 5 1/2	283 1300 L	3	2 1/2	G	TF.LP	DR	Mar	Uni	Ow	P	Pu	TD	SP	SG	16 7	741 FK	6	21	9	52	11	Ele	43					43					
5.80 1																																					

TUNE-UP DATA ON 1951-1956 CARS

MAKE AND MODEL		No. of Cylinders, Bore and Stroke (In.)	VALVES		IGNITION				Cooling System Capacity (Qts.)	Compression Ratio (Standard Head)	CRANK- PIN		FRONT AXLE							
			Inlet Tappet Clearance for Valve Timing (In.)	Intake Valve Opens Deg. Before or After T.C.	Operating Tappet Clearance (In.)		Spark Plug				Timing	Diameter (In.)	Length (In.)	Caster (Deg.)	Camber (Deg.)	Toe-In (In.)	Kingpin Inclination (Deg.)			
					Intake	Exhaust	Make and Model	Gap (In.)												
																		Spark Occurs No. Deg. Before or After T.C.	Breaker Gap (In.)	
BUICK																				
40	1951	8-3 1/2 x 4 1/2		13B		AA	AA	AC-46X	.025	4B	.015	6 1/2	12	6.60	2 1/2	1 1/2	P to 1 1/2 P	N to 1 1/2 P	to 1/2	4 1/2
50	1951	8-3 1/2 x 4 1/2		AA		AA	AA	AC-46X	.025	4B	.015	6 1/2	12	6.90	2 1/2	1 1/2	P to 1 1/2 P	N to 1 1/2 P	to 1/2	4 1/2
70	1951	8-3 1/2 x 4 1/2		AA		AA	AA	AC-46X	.025	6B	.015	8	18	7.20	2 1/2	1 1/2	P to 1 1/2 P	N to 1 1/2 P	to 1/2	4 1/2
40	1952	8-3 1/2 x 4 1/2	.004	13B*	.015H	.015H	AA	AC-46X	.026	4B	.018	5 1/2	12	6.60	2 1/2	1 1/2	P to 1 1/2 P	N to 1 1/2 P	to 1/2	4 1/2
50	1952	8-3 1/2 x 4 1/2	.004	14B		AA	AA	AC-46X	.026	4B	.018	7	12	6.90	2 1/2	1 1/2	P to 1 1/2 P	N to 1 1/2 P	to 1/2	4 1/2
70	1952	8-3 1/2 x 4 1/2	.004	14B		AA	AA	AC-46X	.026	6B	.018	7	18	7.50	2 1/2	1 1/2	P to 1 1/2 P	N to 1 1/2 P	to 1/2	4 1/2
40	1953	8-3 1/2 x 4 1/2	.004	13B*	.015H	.015H	AA	AC-46X	.025	4B	.016	5 1/2	12	7.00	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 1/2	4 1/2
50	1953	8-4 x 3 1/2	.004	25B		AA	AA	AC-44-5	.032	5B	.016	6	16 1/2	8.00	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 1/2	4 1/2
70	1953	8-4 x 3 1/2	.004	25B		AA	AA	AC-44-5	.032	5B	.016	6	16	8.50	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 1/2	4 1/2
40	1954	8-3 1/2 x 3 1/2	.004	25B		AA	AA	AC-44-5	.033	5B	.015	6	16 1/2	7.20	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 0	0
50, 60	1954	8-4 x 3 1/2	.004	25B		AA	AA	AC-44-5	.033	5B	.015	6	16 1/2	8.00	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 0	0
70	1954	8-4 x 3 1/2	.004	25B		AA	AA	AC-44-5	.033	5B	.015	6	16 1/2	8.50	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 0	0
40	1955	8-3 1/2 x 3 1/2	.004	25B		AA	AA	AC-44-5	.033	5B	.015	6	16 1/2	8.40	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 0	0
50, 60	1955	8-4 x 3 1/2	.004	25B		AA	AA	AC-44-5	.033	5B	.015	6	16 1/2	9.00	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 0	0
70	1955	8-4 x 3 1/2	.004	28B		AA	AA	AC-44-5	.033	5B	.015	6	16 1/2	9.00	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 0	0
40	1956	8-4 x 3 1/2	.004	25B		AA	AA	AC-44	.033	5B	.015	6	17 1/2	8.90	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 1/2	7
50, 60, 70	1956	8-4 x 3 1/2	.004	30B		AA	AA	AC-44	.033	5B	.015	6	17 1/2	9.50	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 1/2	7
CADILLAC																				
60, 61, 62, 75	1951	8-3 1/2 x 3 1/2	.001	24B		AA	AA	AC-46-5	.035	5B	.016	5	18	7.50	2 1/2	2	N to 1 1/2 P	N to 1 1/2 P	to 1/2	5'51"
60, 62, 75	1952	8-3 1/2 x 3 1/2		14B		AA	AA	AC-48	.035	5B	.013	5	19	7.50	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 1/2	5'51"
60, 62, 75	1953	8-3 1/2 x 3 1/2		22B		AA	AA	AC-46-5	.035	2 1/2 B	.013	5	19 1/2	8.25	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 1/2	5'51"
60, 62, 75	1954	8-3 1/2 x 3 1/2		22B		AA	AA	AC-46-5	.035	.019	5	19 1/2	8.25	2 1/2	1 1/2	0 to 1N	N to 1 1/2 P	to 1/2	5'51"	
60, 62, 75	1955	8-3 1/2 x 3 1/2		19B		AA	AA	AC-44-5**	.035	2 1/2 B	.019	5	18	9.00	2 1/2	1 1/2	0 to 1N	N to 1 1/2 P	to 1/2	5'51"
60, 62, 75	1956	8-4 x 3 1/2		39B		AA	AA	AC-44	.035	5B	.019	5	17 1/2	9.75	2 1/2	1 1/2	N to 1 1/2 P	N to 1 1/2 P	to 1/2	5'51"
CHEVROLET																				
JJ, JK	1951	6-3 1/2 x 3 1/2		1B	.006H	.013H	AC-46-5	.035	5B	.021	5 1/2	15	8.60	2 1/2	1 1/2	0 to 1P	0 to 1P	to 1/2	4	
2100*	1951	6-3 1/2 x 3 1/2		AA	16B	AA	AA	AC-46-5	.035	5B	.021	5 1/2	15	8.70	2 1/2	1 1/2	0 to 1P	0 to 1P	to 1/2	4
1500	1952	6-3 1/2 x 3 1/2		1B	.006H	.013H	AC-46-5	.035	5B	.018	5	15	6.60	2 1/2	1 1/2	0 to 1P	0 to 1P	to 1/2	4	
2100*	1952	6-3 1/2 x 3 1/2		16B	AA	AA	AA	AC-46-5	.035	5B	.018	5	15	6.70	2 1/2	1 1/2	0 to 1P	0 to 1P	to 1/2	4
1500	1953	6-3 1/2 x 3 1/2		1A	.006H	.013H	AC-44-5	.036	5B	.015	5	15	7.10	2 1/2	1 1/2	0 to 1P	0 to 1P	to 1/2	4	
2100*, 2400*	1953	6-3 1/2 x 3 1/2		16B	AA	AA	AA	AC-44-5	.036	5B	.015	5	15	7.10	2 1/2	1 1/2	0 to 1P	0 to 1P	to 1/2	4
1500, 2100, 2400	1954	6-3 1/2 x 3 1/2		1A	.010H†	.020H†	AC-44-5	.036	2A	.015	5	16	7.50	2 1/2	1	0 to 1P	0 to 1P	to 1/2	4	
2900	1951-55	6-3 1/2 x 3 1/2		19 1/2 B	.010H	.020H	AC-44-5	.036	2A	.016	5	17 1/2	8.00	2 1/2	1	0 to 1P	0 to 1P	to 1/2	4	
1500, 2100, 2400	1955	6-3 1/2 x 3 1/2		1A	.008H†	.013H†	AC-44-5	.036	TC	.019	5	16	7.50	2 1/2	1	N to 1 1/2 P	0 to 1P	to 1/2	4	
1500, 2100, 2400, 2900	1955	6-3 1/2 x 3 1/2		12B44	AA	AA	AA	AC-44-5	.036	4B	.019	4	16	8.00	2 1/2	1 1/2	N to 1 1/2 P	0 to 1P	to 1/2	4
1500, 2100, 2400	1956	6-3 1/2 x 3 1/2		10 1/2 B	AA	AA	AA	AC-44	.036	TC	.019	5	16	8.00	2 1/2	1	1/2 P to 1 1/2 P	0 to 1P	to 1/2	4
1500, 2100, 2400	1956	8-3 1/2 x 3		18B	AA	AA	AA	AC-44	.036	4B	.019	4	16	8.00	2 1/2	1 1/2	1/2 P to 1 1/2 P	0 to 1P	to 1/2	4
2900	1956	8-3 1/2 x 3		21 1/2 B	.008H	.018H	AC-G-43	.036	4B	.019	5	16	9.25	2 1/2	1 1/2	0 to 1P	0 to 1P	to 1/2	4	
CHRYSLER																				
C51	1951	6-3 1/2 x 4 1/2	.014	12B	.008H	.010H	AL-AR8	.035	2B	.020	5	15	7.00	2 1/2	1 1/2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2	
C52, C53, C54	1951	8-3 1/2 x 3 1/2		AA	15B	AA	AA	AL-AR6	.035	TC	.016	8	25	7.50	2 1/2	2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2
C51	1952	6-3 1/2 x 3 1/2	.014C	12B	.008H	.010H	AL-AR8	.035	2B	.019	5	15	7.00	2 1/2	1 1/2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2	
C52, C53, C54, C55	1952	8-3 1/2 x 3 1/2		VTS	15B	AA	AA	AL-4S-140	.035	4B	.017	5	25	7.50	2 1/2	1 1/2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2
C56, C58, C59	1953	8-3 1/2 x 3 1/2		VTS	15B	AA	AA	AL-4S-140	.035	4B	.017	5	25	7.50	2 1/2	1 1/2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2
C60	1953	6-3 1/2 x 4 1/2	.014	12B	.008H	.010H	AL-AR8	.035	TC	.019	5	15	7.00	2 1/2	1 1/2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2	
C62	1954	6-3 1/2 x 4 1/2	.014	12B	.008H	.010H	AL-4S-140	.035	TC	.019	5	15	7.00	2 1/2	1 1/2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2	
C63, C64, C66	1954	8-3 1/2 x 3 1/2		VTS	15B	AA	AA	AL-4GS-150	.035	4B	.017	5	25	7.50	2 1/2	1 1/2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2
C67	1955	8-3 1/2 x 3 1/2		VTS	15B	AA	AA	AL-4S-165	.035	6B	.017	5	24	8.00	2 1/2	1 1/2	0 to 2N	N to 1 1/2 P	to 1/2	5 1/2
C68, C69	1955	8-3 1/2 x 3 1/2		VTS	15B	AA	AA	AL-4GS-175	.035	6B	.017	5	25	8.50	2 1/2	1 1/2	0 to 2N	N to 1 1/2 P	to 1/2	5 1/2
C70	1955	8-3 1/2 x 3 1/2		VTS	15B	AA	AA	AL-4GS-175	.035	6B	.017	5	25	8.50	2 1/2	1 1/2	0 to 2N	N to 1 1/2 P	to 1/2	5 1/2
C300	1955	8-3 1/2 x 3 1/2	.012	35B	.015	.024	AL-4GS-200	.035	10B	.017	5	25	8.50	2 1/2	1 1/2	0 to 2N	N to 1 1/2 P	to 1/2	5 1/2	
C70	1956	8-3 1/2 x 3 1/2		VTS	15B	AA	AA	AL-AGR-42	.035	4B	.017	5	25	9.00	2 1/2	1 1/2	0 to 2N	N to 1 1/2 P	to 1/2	5 1/2
C71	1956	8-3 1/2 x 3 1/2		VTS	5B	AA	AA	AL-AR-52	.035	2B	.017	5	24	8.50	2 1/2	1 1/2	0 to 2N	N to 1 1/2 P	to 1/2	5 1/2
C72, C73	1956	8-3 1/2 x 3 1/2		VTS	15B	AA	AA	AL-AGR-42	.035	4B	.017	5	25	9.00	2 1/2	1 1/2	0 to 2N	N to 1 1/2 P	to 1/2	5 1/2
C72-300	1956	8-3 1/2 x 3 1/2		VTS	35B	.015H	.024H	AL (I)	.035	8B	.017	5	25	9.00	2 1/2	1 1/2	0 to 2N	N to 1 1/2 P	to 1/2	5 1/2
CONTINENTAL																				
60A	1956	8-4 x 3 1/2		18B		AA	AA	Ch-860	.034	5B	.015	5	23	9.00	2 1/2	1 1/2	1/2 P to 1 1/2 P	0 to 1/2 P	to 1/2	7'10"
CROSLEY																				
CD, VC	1951	4-2 1/2 x 2 1/2		5B	.005C	.008C	Ch-J-8	.025	12B	.020	2 1/2	4	8.00	1 1/2	1 1/2	7 1/2 P	2P	to 1/2	6 1/2	
CD	1952	4-2 1/2 x 2 1/2	.005	5B	.005C	.008C	AL-AN7E	.025	12B	.020	2	4	8.00	1 1/2	1 1/2	7 1/2 P	2P	to 1/2	6 1/2	
VC	1952	4-2 1/2 x 2 1/2	.005	5B	.005C	.008C	AL-AN7E	.025	12B	.020	2	4	8.00	1 1/2	1 1/2	7 1/2 P	2P	to 1/2	6 1/2	
DE SOTO																				
S15	1951	6-3 1/2 x 4 1/2	.014	12B	.008H	.010H	AL-AR8	.035	2B	.020	5	15	7.00	2 1/2	1 1/2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2	
S15	1952	6-3 1/2 x 4 1/2	.014	12B	.008H	.010H	AL-AR8	.035	2B	.020	5	15	7.00	2 1/2	1 1/2	1N to 3N	N to 1 1/2 P	to 1/2	5 1/2	
S17	1952	6-3 1/2 x 3 1/2		VTS	12B															

TUNE-UP DATA ON 1951-1956 CARS

MAKE AND MODEL	No. of Cylinders, Bore and Stroke (In.)	VALVES		IGNITION				Cooling System Capacity (Qts.)	Compression Ratio (Standard Head)	CRANK-PIN		FRONT AXLE						
		Inlet Tappet Clearance for Valve Timing (In.)	Intake Valve Opens Before or After T.C.	Operating Tappet Clearance (In.)		Spark Plug				Diameter (In.)	Length (In.)	Caster (Deg.)	Camber (Deg.)	Toe-In (In.)	Kingpin Inclination (Deg.)			
				Intake	Exhaust	Make and Model	Gap (In.)									Spark Occurs Before or After T.C.	Breaker Gap (In.)	
FORD																		
1HA.....1951	6-3 1/2 x 4 1/2	.014	11B	.014C	.018C	Ch-H-10	.031	TC	.025	5	17 1/4	6.80	2 1/2	1 1/2	1N to 1P	0 to 1P	to 1/4	5 1/4
1BA.....1951	6-3 1/2 x 3 1/2	.014	5B	.014C	.018C	Ch-H-10	.031	2B	.015	5	22	6.80	2 1/2	1 1/2	1N to 1P	0 to 1P	to 1/4	5 1/4
6.....1952	6-3 1/2 x 3 1/2	.013	18B	.015H	.015H	Ch-H-10	.036	TC	.025	4	15	7.00	2 1/2	1 1/2	1N to 1P	0 to 1P	to 1/4	5
V8.....1952-53	6-3 1/2 x 3 1/2	.018 1/2	5B	.014C	.018C	Ch-H-10	.031	2B	.015	4	22	7.20	2 1/2	1 1/2	1N to 1P	0 to 1P	to 1/4	5
6.....1953	6-3 1/2 x 3 1/2	.013	13B	.015H	.015H	Ch-H-10	.036	TC	.025	4	15	7.00	2 1/2	1 1/2	1N to 1P	0 to 1P	to 1/4	5
6.....1954	6-3 1/2 x 3 1/2	.013	13B	.015H	.019H	Ch-H-10	.035	3B	.025	4	15	7.20	2 1/2	1 1/2	1N to 1P	0 to 1P	to 1/4	7 7/8
V8.....1954	6-3 1/2 x 3 1/2	.015 1/2	8B	.019H	.019H	Ch-H-10	.035	6B	.015	5	20	7.20	2 1/2	1 1/2	0 to 1P	0 to 1P	to 1/4	7 7/8
6.....1955	6-3 1/2 x 3 1/2	.015 1/2	13B	.015H	.019H	Ch-870	.034	3B	.025	4	15	7.50	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	to 1/4	7 7/8
V8.....1955	6-3 1/2 x 3 1/2	.015 1/2	ER	.019H	.019H	Ch-870	.034	6B	.015	5	19	7.60	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	to 1/4	7 7/8
40A, 40B.....1955	6-3 1/2 x 3 1/2	.016 1/2	12B	.018H	.018H	Ch-870	.034	6B	.015	5	20	8.10	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	to 1/4	7 7/8
8.....1956	6-3 1/2 x 3 1/2	.019H	24B	.019H	.019H	Ch-870	.034	4B	.025	4	14 1/2	8.00	2 1/2	1 1/2	0 to 1 1/2 P	1P to 1 1/2 P	to 1/4	7 7/8
8, Main, Cust.....1956	6-3 1/2 x 3 1/2	.019H	12B	.019H	.019H	Ch-870	.034	3B	.015	5	19	8.00	2 1/2	1 1/2	0 to 1 1/2 P	1P to 1 1/2 P	to 1/4	7 7/8
8, Fairlane.....1956	6-3 1/2 x 3 1/2	.019H	12B	.019H	.019H	Ch-870	.034	3B	.015	5	19	8.00	2 1/2	1 1/2	0 to 1 1/2 P	1P to 1 1/2 P	to 1/4	7 7/8
40A.....1956	6-3 1/2 x 3 1/2	.019H	12B	.019H	.019H	Ch-870	.034	3B	.015	5	21	8.40	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	to 1/4	7 7/8
40A, 40B.....1956	6-3 1/2 x 3 1/2	.019H	12B	.019H	.019H	Ch-870	.034	3B	.015	5	21	8.40	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	to 1/4	7 7/8
FRAZER																		
515, 516.....1951	6-3 1/2 x 4 1/2	.014	10B	.014C	.014C	AL-A5G	.032	4B	.020	5 1/2	13	7.30	2 1/2	1 1/2	1N to 1P	0 to 1 1/2 P	0 to 1/4	5 1/4
HENRY J																		
513.....1951	4-3 1/2 x 4 1/2	.020	9B	.016	.016	AL-AN7	.030	TC	.020	4	10 1/4	7.00	1 1/2	1 1/2	1N to 1P	1P to 1P	to 1/4	4 1/2
514.....1951	6-3 1/2 x 3 1/2	.020	5B	.016	.016	AL-AN7	.030	TC	.020	5	9	7.00	1 1/2	1 1/2	1N to 1P	1P to 1P	to 1/4	4 1/2
513.....1952	4-3 1/2 x 4 1/2	.020	9B	.016	.016	AL-AN7	.030			4	7.00	1 1/2	1 1/2	1N to 1P	1P to 1P	to 1/4	4 1/2	
514.....1952	6-3 1/2 x 3 1/2	.020	5B	.016	.016	AL-AN7	.030			5	7.00	1 1/2	1 1/2	1N to 1P	1P to 1P	to 1/4	4 1/2	
533.....1953	4-3 1/2 x 4 1/2	.020	9B	.016C	.016C	AL-A7	.030	5B	.022	4	10 1/4	7.00	1 1/2	1 1/2	1N to 1P	1P to 1P	to 1/4	4 1/2
534.....1953	6-3 1/2 x 3 1/2	.020	5B	.016C	.016C	AL-A7	.030	5B	.022	5	9 1/2	7.00	1 1/2	1 1/2	1N to 1P	1P to 1P	to 1/4	4 1/2
543.....1954	4-3 1/2 x 4 1/2	.020	9B	.016C	.016C	AL-A7	.030	5B	.022	4	10 1/4	7.00	1 1/2	1 1/2	1N to 1P	1P to 1P	to 1/4	4 1/2
544.....1954	6-3 1/2 x 3 1/2	.020	5B	.016C	.016C	AL-A7	.030	5B	.022	5	9 1/2	7.00	1 1/2	1 1/2	1N to 1P	1P to 1P	to 1/4	4 1/2
HUDSON																		
4A.....1951	6-3 1/2 x 3 1/2		7 1/2 B	.008H	.010H	Ch-H-8	.032	TC	.020	7 1/2	18 1/2	6.70	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 3/8"
5A, 6A.....1951	6-3 1/2 x 4 1/2		7 1/2 B	.008H	.010H	Ch-H-8	.032	TC	.020	7 1/2	18 1/2	6.70	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 3/8"
7A.....1951	6-3 1/2 x 4 1/2		7 1/2 B	.008H	.010H	Ch-H-8	.032	TC	.020	7 1/2	18 1/2	6.70	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 3/8"
8A.....1951	6-3 1/2 x 4 1/2		10 7/8 B	.008H	.010H	Ch-H-8	.032	TC	.017	8	18 1/2	6.70	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 3/8"
4B.....1952	6-3 1/2 x 3 1/2	.008	27B	.008H	.010H	Ch-H-8	.032	TC	.020	7	18 1/2	6.70	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 3/8"
5B, 6B.....1952	6-3 1/2 x 4 1/2	.008	27B	.008H	.010H	Ch-H-8	.032	TC	.020	7	18 1/2	6.70	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 3/8"
7B.....1952	6-3 1/2 x 4 1/2	.008	27B	.008H	.010H	Ch-H-11	.032	TC	.020	7	18 1/2	7.20	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 3/8"
8B.....1952	6-3 1/2 x 4 1/2	.008	10 7/8 B	.008H	.010H	Ch-H-8	.032	TC	.017	7	18 1/2	6.70	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 3/8"
4C.....1953	6-3 1/2 x 3 1/2	.008	26 1/2 B	.008H	.010H	Ch-H-8	.032	TC	.020	7	18 1/2	6.70	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 1/2
5C.....1953	6-3 1/2 x 4 1/2	.008	26 1/2 B	.008H	.010H	Ch-H-8	.032	TC	.020	7	18 1/2	6.70	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 1/2
7C.....1953	6-3 1/2 x 4 1/2	.008	26 1/2 B	.008H	.010H	Ch-H-11	.032	TC	.020	7	18 1/2	7.20	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 1/2
1D, 2D, 3D.....1954	6-3 1/2 x 4 1/2	.010	26 1/2 B	.010H	.012H	Ch-H-10	.032	TC	.020	5	15	7.50	1 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	4
4D.....1954	6-3 1/2 x 3 1/2	.008	33 1/2 B	.008H	.010H	Ch-H-10	.032	TC	.020	7	18 1/2	7.00	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 1/2
5D.....1954	6-3 1/2 x 4 1/2	.008	33 1/2 B	.008H	.010H	Ch-H-10	.032	TC	.020	7	18 1/2	7.00	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 1/2
7D.....1954	6-3 1/2 x 4 1/2	.008	33 1/2 B	.008H	.010H	Ch-H-11	.032	TC	.020	7	18 1/2	7.50	2 1/2	1 1/2	1P to 1 1/2 P	1P to 1 1/2 P	0 to 1/4	3 1/2
3554D.....1955	6-3 1/2 x 4 1/2	.010H	26 1/2 B	.010H	.012H	Ch-H-10	.032	TC	.020	5	13	7.50	1 1/2	1 1/2	0 to 1P	1N to 1P	to 1/4	3 3/8"
3556D.....1955	6-3 1/2 x 4 1/2	.010	33 1/2 B	.010H	.012H	CH-H-11	.030	TC	.020	7	18 1/2	7.50	2 1/2	1 1/2	0 to 1P	1N to 1P	to 1/4	3 3/8"
3558D.....1955	6-3 1/2 x 3 1/2	NU	14B	AA	AA	AL-AG-5	.035	5B	.016	5	20	8.25	2 1/2	1 1/2	0 to 1P	1N to 1P	to 1/4	3 3/8"
3564D.....1956	6-3 1/2 x 4 1/2	.010	26 1/2 B	.010C	.015C	Ch-H-10	.032	TC	.019	5	13	7.50	1 1/2	1 1/2	0 to 1P	1N to 1P	to 1/4	3 3/8"
3566D.....1956	6-3 1/2 x 4 1/2		33 1/2 B	AA	AA	Ch-H-11	.030	TC	.019	7	18 1/2	7.50	2 1/2	1 1/2	0 to 1P	1N to 1P	to 1/4	3 3/8"
3568D.....1956	6-4 x 3 1/2		14B	AA	AA	Ch-N-18	.036	5B	.016	5	27	9.55	2 1/2	1 1/2	0 to 1P	1N to 1P	to 1/4	3 3/8"
KAISER																		
511, 512.....1951	6-3 1/2 x 4 1/2	.014	10B	.014C	.014C	AL-A5	.032	4B	.020	5 1/2	13 1/2	7.30	2 1/2	1 1/2	1N to 1P	0 to 1 1/2 P	to 1/4	5 1/4
511, 512.....1952	6-3 1/2 x 4 1/2	.014	10B	.014C	.014C	AL-A5	.032	4B	.020	5 1/2	13 1/2	7.30	2 1/2	1 1/2	1N to 1P	0 to 1 1/2 P	to 1/4	5 1/4
531, 532.....1953	6-3 1/2 x 4 1/2	.018	10B	.014C	.014C	AL-A7	.030	4B	.022	5	12 1/2	7.30	2 1/2	1 1/2	1N to 1P	0 to 1 1/2 P	to 1/4	5 1/4
542.....1954	6-3 1/2 x 4 1/2	.018	10B	.014C	.014C	AL-A7	.030	4B	.016	5	12 1/2	7.30	2 1/2	1 1/2	1N to 1P	0 to 1 1/2 P	to 1/4	5 1/4
545.....1954	6-3 1/2 x 4 1/2	.018	10B	.014C	.014C	AL-A7	.030	4B	.022	5	12 1/2	7.30	2 1/2	1 1/2	1N to 1P	0 to 1 1/2 P	to 1/4	5 1/4
LINCOLN																		
1EL, 1EH.....1951	8-3 1/2 x 4 1/2	.006	5B	AA	AA	Ch-H-10	.031	4B	.015	8 1/2	34 1/2	7.00	2 1/2	2 1/4	0 to 1 1/2 N	0 to 1 1/2 P	to 1/4	5
V8.....1952	8-3 1/2 x 3 1/2		18B	AA	AA	Ch-H-10	.031	3B	.015	5	22 1/2	7.50	2 1/2	1 1/2	0 to 1 1/2 N	0 to 1 1/2 P	to 1/4	7 10"
V8.....1953	8-3 1/2 x 3 1/2	AA	18B	AA	AA	Ch-H-10	.036	3B	.015	5	22 1/2	8.00	2 1/2	1 1/2	0 to 1 1/2 N	0 to 1 1/2 P	to 1/4	7 10"
V8.....1954	8-3 1/2 x 3 1/2		18B	AA	AA	Ch-H-10	.035	3B	.015	5	22 1/2	8.00	2 1/2	1 1/2	0 to 1 1/2 N	0 to 1 1/2 P	to 1/4	7 10"
73A, 73B.....1955	8-3 1/2 x 3 1/2	ER	8B	AA	AA	Ch-870	.034	5B	.015	5	23	8.50	2 1/2	1 1/2	0 to 1 1/2 N	0 to 1 1/2 P	to 1/4	7 10"
73A, 73B.....1956	8-4 x 3 1/2		18B	AA	AA	Ch-860	.034	5B	.015	5	23 1/2	9.00	2 1/2	1 1/2	0 to 1 1/2 N	0 to 1 1/2 P	to 1/4	7 10"
MERCURY																		
TCM.....1951	6-3 1/2 x 4	.015	10B	.012C		Ch-H-10	.031	2B	.015	6	22 1/2	6.80	2 1/2	1 1/2	0 to 1 1/2 N	0 to 1 1/2 P	to 1/4	5
V8.....1952-53	6-3 1/2 x 4	.018 1/2	5B	.014C	.018C	Ch-H-H												

TUNE-UP DATA ON 1951-1956 CARS

MAKE AND MODEL	No. of Cylinders, Bore and Stroke (In.)	VALVES				IGNITION						Crankcase Capacity (Qts.)	Cooling System Capacity (Qts.)	Compression Ratio (Standard Head)	CRANK-PIN		FRONT AXLE				
		Inlet Tappet Clearance for Valve Timing (In.)	Intake Valve Opens Before or After T.C.	Deg.	Operating Tappett Clearance (In.)	Spark Plug		Timing							Diameter (In.)	Length (In.)	Caster (Deg.)	Camber (Deg.)	Toe-In (In.)	Kingpin Inclination (Deg.)	
						Intake	Exhaust	Make and Model	Gap (In.)	Spark Occurs No. Deg. Before or After T.C.	Breaker Gap (In.)										Crankcase Capacity (Qts.)
NASH-HUDSON																					
541, 542	1955	4-2 1/2 x 3 1/2	.015	5B	.015C	.015C	Ch-N-8-B	.024	11B	.015	4	7.20	1 1/2	1	2P to 3P	1 1/2 P to 1 1/2 P	0 to 1/2	6 1/2	8		
5510	1955	6-3 1/2 x 4 1/2	.015	10B	.015H	.015H	AL-A-7A	.030	4A	.022	4	7.30	2 1/2	1	3 1/2 P to 3 1/2 P	3 1/2 P to 3 1/2 P	0 to 1/2	8	8		
561, 562	1956	4-2 1/2 x 3 1/2	.015	5B	.015H	.015H	AL-7J	.030	TC	.016	4	7.20	2 1/2	1	2P to 3P	1 1/2 P to 1 1/2 P	0 to 1/2	6 1/2	8		
5610	1956	6-3 1/2 x 4 1/2	.015	12 1/2 B	.012H	.016H	AL-7J	.030	TC	.016	4	7.47	2 1/2	1	0 to 1 1/2 P	1 1/2 N to 1 1/2 P	1/2 to 3/4	6 1/2	11'		
OLDSMOBILE																					
88, 98	1951	8-3 1/2 x 3 1/2	AA	13 1/2 B	AA	AA	AC-46-5	.030	2 1/2 B	.016	5	7.50	2 1/2	2	0 to 3/4 N	3/4 N to 3/4 P	1/2 to 1	4 1/2	4 5/8		
88, 98	1952	8-3 1/2 x 3 1/2	.003 1/2	13 1/2 B	AA	AA	AC-46-5	.030	2 1/2 B	.016	5	7.50	2 1/2	2	0 to 3/4 N	3/4 N to 3/4 P	1/2 to 1	4 1/2	4 5/8		
88, 98	1953	8-3 1/2 x 3 1/2	.003 1/2	13 1/2 B	AA	AA	AC-46-5	.030	2 1/2 B	.016	5	7.50	2 1/2	2	0 to 3/4 N	3/4 N to 3/4 P	1/2 to 1	4 1/2	4 5/8		
88, 98	1954	8-3 1/2 x 3 1/2	ER	13 1/2 B	AA	AA	AC-46-5	.030	5B	.016	5	8.25	2 1/2	2	0 to 3/4 N	3/4 N to 3/4 P	1/2 to 1	4 1/2	4 5/8		
88, 98	1955	8-3 1/2 x 3 1/2	ER	13 1/2 B	AA	AA	AC-46-5	.030	5B	.016	5	8.50	2 1/2	2	0 to 3/4 N	3/4 N to 3/4 P	1/2 to 1	4 1/2	4 5/8		
88, 98	1956	8-3 1/2 x 3 1/2	ER	11 1/2 B	AA	AA	AC-44	.030	5B	.016	5	9.25	2 1/2	2	0 to 3/4 N	3/4 N to 3/4 P	1/2 to 1	4 1/2	5 1/8		
PACKARD																					
200	1951	8-3 1/2 x 3 1/2	.012	15B	.007H	.010H	(d)	.028	6B	.015	7	7.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
300	1951	8-3 1/2 x 4 1/2	AA	15B	AA	AA	(d)	.028	6B	.015	7	7.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
400	1951	8-3 1/2 x 4 1/2	AA	15B	AA	AA	(d)	.028	6B	.015	7	7.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
200	1952	8-3 1/2 x 3 1/2	.012	15B	.007H	.010H	(e)	.026	6B	.017	7	7.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
250, 300	1952	8-3 1/2 x 4 1/2	NU	15B	AA	AA	(e)	.026	6B	.017	7	7.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
400	1952	8-3 1/2 x 4 1/2	NU	15B	AA	AA	(e)	.026	6B	.017	7	7.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
2601	1953	8-3 1/2 x 3 1/2	.013	15B	.007H	.010H	(d)	.026	6B	.015	7	7.70	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 1/2	5 1/2		
2611	1953	8-3 1/2 x 4 1/2	.013	15B	.007H	.010H	(d)	.026	6B	.015	7	7.70	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 1/2	5 1/2		
2602, 2606, 2626, 2631	1953	8-3 1/2 x 4 1/2	AA	15B	AA	AA	(d)	.026	6B	.015	7	8.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 1/2	5 1/2		
5400	1954	8-3 1/2 x 3 1/2	.012	15B	.007H	.010H	Ch-J-5	.028	6B	.015	7	7.70	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
5401, 5411	1954	8-3 1/2 x 4 1/2	.012	10B	.007H	.010H	Ch-J-5	.028	6B	.015	7	8.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
5402	1954	8-3 1/2 x 4 1/2	NU	10B	AA	AA	Ch-J-5	.028	6B	.015	7	8.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
5406, 5426, 5431	1954	8-3 1/2 x 4 1/2	NU	22B	AA	AA	Ch-J-5	.028	TC	.015	7	8.70	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8		
5540	1955	8-3 1/2 x 3 1/2	NU	18B	AA	AA	(g)	.035	6B	.016	5	26	8.50	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8	
5560, 5580	1955	8-4 x 3 1/2	NU	14B	AA	AA	Ch-H-10	.035	6B	.016	5	26	8.50	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8	
5640, 5660	1956	8-4 x 3 1/2	NU	14B	AA	AA	Ch-N-18	.035	5B	.016	5	26	8.50	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8	
5680, 5688	1956	8-4 x 3 1/2	NU	14B	AA	AA	Ch-N-18	.035	10B	.016	5	26	10.00	2 1/2	1 1/2	1N to 1 1/2 N	1 1/2 N to 1 1/2 P	0 to 1/2	5 5/8	5 5/8	
PLYMOUTH																					
P-22, P-23	1951	6-3 1/2 x 4 1/2	.014	12B	.008H	.010H	AL-AR-8	.035	2B	.019	5	13	7.00	2 1/2	1 1/2	1N to 1P	3/4 N to 3/4 P	0 to 1/2	5 1/2	5 1/2	
P-22, P-23	1952	6-3 1/2 x 4 1/2	.014	12B	.010H	.010H	AL-AR-8	.035	2B	.020	5	13	7.00	2 1/2	1 1/2	1N to 1P	3/4 N to 3/4 P	0 to 1/2	5 1/2	5 1/2	
P-24	1953	6-3 1/2 x 4 1/2	.014	12B	.010H	.010H	AL-AR-8	.035	2B	.020	5	13	7.10	2 1/2	1 1/2	1N to 1P	3/4 N to 3/4 P	0 to 1/2	5 1/2	5 1/2	
P-25 (Early)	1954	6-3 1/2 x 4 1/2	.014	12B	.010H	.010H	AL-AS-140	.035	2B	.020	5	13	7.10	2 1/2	1 1/2	1N to 1P	3/4 N to 3/4 P	0 to 1/2	5 1/2	5 1/2	
P-25 (Late)	1954	6-3 1/2 x 4 1/2	.014	12B	.010H	.010H	AL-AS-140	.035	2B	.020	5	13	7.25	2 1/2	1 1/2	1N to 1P	3/4 N to 3/4 P	0 to 1/2	5 1/2	5 1/2	
P-26	1955	6-3 1/2 x 4 1/2	.014	12B	.010H	.010H	AL-AS-140	.035	2B	.020	5	13	7.40	2 1/2	1 1/2	1N to 1P	3/4 N to 3/4 P	0 to 1/2	5 1/2	5 1/2	
P-27	1955	6-3 1/2 x 3 1/2	VTS	14B	AA	AA	AL-AS-165	.035	4B	.018	5	19	7.60	2 1/2	1 1/2	0 to 2N	1 1/2 N to 1 1/2 P	0 to 1/2	5 1/2	5 1/2	
P-27	1955	6-3 1/2 x 3 1/2	VTS	14B	AA	AA	AL-AS-165	.035	4B	.018	5	19	7.60	2 1/2	1 1/2	0 to 2N	1 1/2 N to 1 1/2 P	0 to 1/2	5 1/2	5 1/2	
P-28	1956	6-3 1/2 x 4 1/2	.014	12B	.010H	.010H	AL-AR-80	.035	2B	.020	5	13	7.60	2 1/2	1 1/2	0 to 2N	1 1/2 N to 1 1/2 P	0 to 1/2	5 1/2	5 1/2	
P-29	1956	6-3 1/2 x 3 1/2	VTS	14B	AA	AA	AL-AR-52	.035	4B	.017	5	19	8.00	2 1/2	1 1/2	0 to 2N	1 1/2 N to 1 1/2 P	0 to 1/2	5 1/2	5 1/2	
P-29	1956	6-3 1/2 x 3 1/2	VTS	14B	.012H	.020H	AL-AR-52	.035	4B	.017	5	20	8.00	2 1/2	1 1/2	0 to 2N	1 1/2 N to 1 1/2 P	0 to 1/2	5 1/2	5 1/2	
P-29	1956	6-3 1/2 x 3 1/2	VTS	9B	.010H	.018H	AL-AS-250	.035	4B	.017	5	20	9.25	2 1/2	1 1/2	0 to 2N	1 1/2 N to 1 1/2 P	0 to 1/2	5 1/2	5 1/2	
PONTIAC																					
25	1951	6-3 1/2 x 4 1/2	.015	5B	.012H	.012H	AC-45	.026	6B	.022	6	18 1/2	6.50	2 1/2	1 1/2	1N to 1N	1 1/2 N to 1 1/2 P	0 to 1/2	5	5	
27	1951	6-3 1/2 x 3 1/2	.015	5B	.012H	.012H	AC-45	.026	6B	.016	6	19 1/2	6.50	2 1/2	1 1/2	1N to 1N	1 1/2 N to 1 1/2 P	0 to 1/2	5	5	
25	1952	6-3 1/2 x 4 1/2	.015C	5B	.011H	.013H	AC-44-5	.026	6B	.022	5	18	6.80	2 1/2	1 1/2	1N to 1N	1 1/2 N to 1 1/2 P	0 to 1/2	5	5	
27	1952	6-3 1/2 x 3 1/2	.015C	5B	.011H	.013H	AC-44-5	.026	6B	.016	5	19	6.80	2 1/2	1 1/2	1N to 1N	1 1/2 N to 1 1/2 P	0 to 1/2	5	5	
25	1953	6-3 1/2 x 4 1/2	.015C	12 1/2 B	.012H	.012H	AC-44-5	.026	TC	.022	5	18 1/2	7.00**	2 1/2	1 1/2	1N to 1 1/2 P	1 1/2 P to 3 1/2 P	0 to 1/2	5 1/2	5 1/2	
27	1953	6-3 1/2 x 3 1/2	.015C	5B	.012H	.012H	AC-44-5	.026	6B	.016	5	19 1/2	6.80**	2 1/2	1 1/2	1N to 1 1/2 P	1 1/2 P to 3 1/2 P	0 to 1/2	5 1/2	5 1/2	
25	1954	6-3 1/2 x 4 1/2	.015C	12 1/2 B	.012H	.012H	AC-44-5	.026	3B	.016	5	18 1/2	7.00**	2 1/2	1 1/2	1N to 1 1/2 P	0 to 1P	0 to 1/2	5 1/2	5 1/2	
27, 29	1954	6-3 1/2 x 3 1/2	.015C	5B	.012H	.012H	AC-44-5	.026	6B 1/2	.016	5	18 1/2	6.80**	2 1/2	1 1/2	1N to 1 1/2 P	0 to 1P	0 to 1/2	5 1/2	5 1/2	
27, 28	1955	6-3 1/2 x 3 1/2	ER	22B	AA	AA	AC-44-5	.036	5B	.016	5	24	8.00	2 1/2	1 1/2	1N to 1 1/2 N	0 to 1P	0 to 1/2	5 1/2	5 1/2	
27, 28	1956	6-3 1/2 x 3 1/2	ER	22B	AA	AA	AC-44	.036	5B	.016	5	22 1/2	8.90	2 1/2	1 1/2	1N to 1 1/2 N	0 to 1P	0 to 1/2	5 1/2	5 1/2	
STUDEBAKER																					
10G	1951	6-3 x 4	.020	15B	.016C	.016C	Ch-J-7	.025	2B	.020	5	10	7.00	1 1/2	1 1/2	1N to 2 1/2 N	0 to 1P	to 1/2	5 1/2	5 1/2	
H	1951	6-3 1/2 x 3 1/2	.020	11B	.015	.015	Ch-H-9	.035	8B	.016	6	17 1/2	7.00	2	1 1/2	1N to 2 1/2 N	0 to 1P	to 1/2	5 1/2	5 1/2	
12G	1952	6-3 x 4	.020	15B	.016C	.016C	Ch-J-7	.025	2B	.020	5	10	7.00	1 1/2	1 1/2	1N to 2 1/2 N	0 to 1P	to 1/2	5 1/2	5 1/2	
3H	1952	6-3 1/2 x 3 1/2	.020	11B	.015C	.015C	Ch-H-9	.035	8B	.016	6	17 1/2	7.00	2	1 1/2	1N to 2 1/2 N	0 to 1P	to 1/2	5 1/2	5 1/2	
14G	1953	6-3 x 4	.020	15B	.016C	.016C	Ch-J-7	.025	2B	.020	5	10	7.00	1 1/2	1 1/2	1N to 2 1/2 N	0 to 1P	to 1/2	5 1/2	5 1/2	
4H	1953	6-3 1/2 x 3 1/2	.030	11B	.022H	.022H	Ch-H-10	.035	4B	.016	6	17 1/2	7.00	2	1 1/2	1N to 2 1/2 N	0 to 1P	to 1/2	5 1/2	5 1/2	
150	1954	6-3 x 4	.020	15B	.016C	.016C	Ch-J-7	.031	2B	.020	5	10	7.50	1 1/2	1 1/2	1N to 2 1/2 N	0 to 1P	to 1/2	5 1/2	5 1/2	
5H, 5HY	1954	6-3 1/2 x 3 1/2	.030	11B	.022H	.022H	Ch-H-11	.035	4B	.013	6	17 1/2	7.50	2	1 1/2	1N to 2 1/2 N	0 to 1P	to 1/2	5 1/2	5 1/2	
166G</																					

GASOLINE ENGINES

1956



SMALL

MAKE AND MODEL	Designed for Use	Number of Cycles	Type	No. of Cylinders	Bore and Stroke (In.)	Total Displacement (Cu. In.)	Compression Ratio (to 1)	Valve Location	ENGINE		Torque—Lb. Ft. at RPM	Weight (Lb.)	GOV- ERNOR		Ignition System Type	FUEL SYSTEM		Fuel Used	Starting Method		
									Horsepower	RPM			Type	Type		Type	Make				
																				Rated at RPM	Continuous at RPM
AIR COOLED																					
Briggs & Stratton	5S	General Purpose	4	Ver	1	2x1 1/2	4.71	5.29	L	1.00-3200	.85-3200	1.60-3200	30	Y	Av	Mag	MV	Own	G	Rr	
	6	General Purpose	4	Ver	1	2x2	6.28	5.88	L	2.00-3600	1.70-3600	2.90-3600	34	Y	MA	Mag	Car	Own	G	Rr	
	6B	General Purpose	4	Ver	1	2 1/2 x 1 1/2	6.30	5.90	L	2.25-3600	1.90-3600	3.29-3600	23	Y	Av	Mag	Car	Own	G	Rr	
	6B-H	Lawn Mowers	4	Hor	1	2 1/2 x 1 1/2	6.30	5.90	L	2.25-3600	1.70-3600	2.92-3600	19 1/2	Y	Av	Mag	Car	Own	G	Rr	
	6B-HS	Lawn Mowers	4	Hor	1	2 1/2 x 1 1/2	6.30	5.90	L	1.60-3200	1.36-3200	2.62-3200	18 1/2	Y	Av	Mag	MV	Own	G	Rr	
	6B-S	General Purpose	4	Ver	1	2x2	6.30	5.88	L	1.60-3200	1.36-3200	2.60-3200	21	Y	Av	Mag	MV	Own	G	Rr	
	6S	General Purpose	4	Ver	1	2x2	6.28	5.88	L	1.60-3200	1.36-3200	2.60-3200	33	Y	Av	MA	Mag	Own	G	Rr	
	8	General Purpose	4	Ver	1	2 1/2 x 2	7.95	5.40	L	2.50-3600	2.10-3600	3.70-3600	36	Y	MA	Mag	Car	Own	G	Rr	
	8B	General Purpose	4	Ver	1	2 1/2 x 1 1/2	7.75	6.00	L	2.75-3800	2.34-3600	4.02-3600	25	Y	Av	Mag	Car	Own	G	Rr	
	8B-H	Lawn Mowers	4	Hor	1	2 1/2 x 1 1/2	7.75	6.00	L	2.75-3800	2.34-3600	4.02-3600	19 1/2	Y	Av	Mag	Car	Own	G	Rr	
	8B-HA	Lawn Mowers	4	Hor	1	2 1/2 x 1 1/2	7.75	6.00	L	2.75-3800	2.34-3600	4.02-3600	22 1/2	Y	Av	Mag	Car	Own	G	Rc	
	9	General Purpose	4	Ver	1	2 1/2 x 2 1/2	8.95	5.40	L	3.35-3600	2.80-3600	4.90-3600	61	Y	Me	Mag	Car	Own	G	HR	
	14	General Purpose	4	Ver	1	2 1/2 x 2 1/2	14.21	5.40	L	5.25-3600	4.40-3600	7.70-3600	76	Y	Me	Mag	Car	Own	G	HR	
Clinton	AVS200, VS200	General Purpose	2	Ver	1	17 1/2 x 1 1/2	22.97	5.40	L	8.40-3600	7.10-3600	12.30-3600	98	Y	Av	Mag	Car	Own	G	Rr	
	AVS400, VS400	General Purpose	2	Ver	1	17 1/2 x 1 1/2	5.76	(a)	L	2.50-3600	2.10-3600	3.50-2800	15 1/2	Y	Av	Mag	Car	O-C	G	Rr	
	VS2100	General Purpose	4	Ver	1	2 1/2 x 1 1/2	7.20	5.95	L	1.75-3600	1.50-3600	2.70-2400	19	Y	Av	Mag	Car	O-C	G	Rr	
	VS100	General Purpose	4	Ver	1	2 1/2 x 1 1/2	7.20	5.95	L	2.50-3600	2.10-3600	3.70-2800	19	Y	Av	Mag	Car	O-C	G	Rr	
	VS3100	General Purpose	4	Ver	1	2 1/2 x 1 1/2	8.30	6.00	L	3.00-3800	2.50-3600	4.50-2800	19	Y	Av	Mag	Car	O-C	G	Rr	
	VS800	General Purpose	4	Ver	1	2 1/2 x 1 1/2	8.30	6.00	L	3.00-3600	2.50-3600	4.50-2800	38	Y	Av	Mag	Car	O-C	G	Rr	
	VS700	General Purpose	4	Ver	1	2x1 1/2	5.89	5.90	L	2.00-3600	1.70-3600	3.20-2800	35	Y	Av	Mag	Car	O-C	G	Rr	
	A200	General Purpose	4	Hor	1	17 1/2 x 1 1/2	4.50	(a)	L	1.75-3600	1.50-3600	2.50-2800	18	Y	Av	Mag	Car	O-C	G	Rr	
	A400	General Purpose	4	Hor	1	2 1/2 x 1 1/2	5.76	(a)	L	2.50-3600	2.10-3600	3.50-2800	18	Y	Av	Mag	Car	O-C	G	Rr	
	A2100	General Purpose	4	Hor	1	2 1/2 x 1 1/2	7.20	5.95	L	1.75-3600	1.50-3600	2.70-2400	19	Y	Av	Mag	Car	O-C	G	Rr	
	100	General Purpose	4	Hor	1	2 1/2 x 1 1/2	7.20	5.95	L	2.50-3600	2.10-3600	3.70-2800	19	Y	Av	Mag	Car	O-C	G	Rr	
	3100	General Purpose	4	Hor	1	2 1/2 x 1 1/2	8.30	6.00	L	3.00-3600	2.50-3600	4.50-2800	19	Y	Av	Mag	Car	O-C	G	Rr	
	D700	General Purpose	4	Hor	1	2 1/2 x 1 1/2	6.65	5.90	L	2.00-3600	1.70-3600	3.20-2800	39	Y	Fb	Mag	Car	O-C	G	Rr	
	900	General Purpose	4	Hor	1	2 1/2 x 1 1/2	8.30	6.00	L	3.00-3800	2.50-3600	4.50-2800	41	Y	Fb	Mag	Car	O-C	G	Rr	
	1200	General Purpose	4	Hor	1	2 1/2 x 1 1/2	10.20	5.90	L	3.60-3600	3.10-3600	5.60-2800	43 1/2	Y	Fb	Mag	Car	O-C	G	Rr	
	1600	General Purpose	4	Hor	1	2 1/2 x 2 1/2	16.30	5.90	L	6.30-3200	5.40-3200	10.50-2800	76	Y	Fb	Mag	Car	O-C	G	Rr	
	2500	General Purpose	4	Hor	1	3 1/2 x 3 1/2	25.00	5.90	L	9.00-3200	7.70-3200	16.20-2200	104	Y	Fb	Mag	Car	O-C	G	Rr	
Continental	AUT, AUTB	General Purpose	4	(b)	1	2 1/2 x 2	7.10	5.70	L	2.00-3600	1.70-3600	3.02-3000	36	Y	MA	Mag	Car	CTZ	G	BR	
	AUTR	General Purpose*	4	(b)	1	2 1/2 x 2	7.10	5.70	L	2.00-3600	1.70-3600	3.02-3000	41	Y	MA	Mag	Car	CTZ	G	BR	
	AD7, AW7	Lawn Mowers	4	Ver	1	2 1/2 x 2	7.10	5.70	L	2.00-3600	1.70-3600	3.02-3000	41	Y	MA	Mag	Car	CTZ	G	BR	
	AUB, AUBB	General Purpose	4	(b)	1	2 1/2 x 2	7.10	6.00	L	2.00-3600	1.70-3600	3.02-3000	36	Y	MA	Mag	Car	CTZ	G	BR	
	AUBR	General Purpose*	4	(b)	1	2 1/2 x 2	7.95	5.80	L	2.50-3600	2.12-3600	4.10-2600	36	Y	MA	Mag	Car	CTZ	G	BR	
	ADB, ADBB	Lawn Mowers	4	Ver	1	2 1/2 x 2	7.95	5.80	L	2.50-3600	2.12-3600	4.10-2600	41	Y	MA	Mag	Car	CTZ	G	BR	
	AUBS	General Purpose	4	(b)	1	2 1/2 x 2	8.40	6.00	L	3.00-3600	2.75-3600	4.50-2600	38	Y	MA	Mag	Car	CTZ	G	BR	
	AUBSR	General Purpose*	4	(b)	1	2 1/2 x 2	8.40	6.00	L	3.00-3600	2.75-3600	4.50-2600	41	Y	MA	Mag	Car	CTZ	G	BR	
Cushman	AD85, AW85	Lawn Mowers	4	Ver	1	2 1/2 x 2	8.40	6.00	L	3.00-3600	2.75-3600	4.50-2600	41	Y	Av	Mag	Car	CTZ	G	BR	
	Husky-M6	General Purpose	4	Ver	1	2 1/2 x 2 1/2	12.30	4.70	L	3.00-3000	2.60-3000	5.20-2000	65	Y	Fb	Mag	Car	Til	G	R	
	Husky-M7	General Purpose	4	Ver	1	2 1/2 x 2 1/2	14.90	5.40	L	4.50-3000	3.80-3000	7.90-2000	65	Y	Fb	Mag	Car	Til	G	R	
	Husky-M8	General Purpose	4	Ver	1	2 1/2 x 2 1/2	17.80	5.90	L	5.00-3000	4.30-3000	9.50-2000	65	Y	Fb	Mag	Car	Til	G	R	
	Husky-M9	General Purpose	4	Ver	1	3x2 1/2	20.30	6.60	L	7.00-3600	5.60	11.90-2600	65	Y	Fb	Mag	Car	Til	G	RPE	
Gladden	40M	General Purpose	4	Ver	1	2 1/2 x 3	14.70	4.50	L	4.30-3200	4.30-3200	8.40-2200	79	Y	Fb	Mag	Car	MS	G,K	R	
	50	General Purpose	4	Ver	1	2 1/2 x 3	14.70	4.50	L	4.30-3200	4.30-3200	8.40-2200	80	Y	Fb	Mag	Car	MS	G	Rr	
	75	General Purpose	4	Ver	1	2 1/2 x 3	19.40	5.70	L	5.25-3200	5.25-3200	9.20-2500	81	Y	Fb	Mag	Car	MS	G	Rr	
	75ES	General Purpose	4	Ver	1	2 1/2 x 3	19.40	5.70	L	7.00-3200	7.00-3200	13.50-2200	83	Y	Fb	Mag	Car	MS	G,K	Rr	
	75M	Marine	4	Ver	1	2 1/2 x 3	19.40	5.70	L	6.50-3200	6.50-3200	11.80-3200	136	N	MA	Mag	Car	MS	G	Ele	
	75MES	Marine	4	Ver	1	2 1/2 x 3	19.40	5.70	L	7.00-3200	7.00-3200	11.80-3200	86	N	MA	Mag	Car	MS	G	Rr	
	MC	Motorcycle	4	Ver	1	2 1/2 x 3	19.40	6.00	L	9.50-5000	9.00-4600	12.30-3000	138	N	MA	Mag	Car	Am	G	Ele	
Gravely	L	AI	4	Ver	1	3 1/2 x 3 1/2	29.00	5.00	T	5.00-2400	4.00-1800	15.00-1000	275	Opt	MA	Mag	Car	Zen	G	BP	
Homelite	17	Chain Saws	2	Ver	1	2x1 1/2	4.33			3.50-5800	3.50-5800		22	Y	Av	Mag	Car	O-T	G	Hc	
	5-20	Chain Saws	2	Ver	1	2 1/2 x 1 1/2	6.70	5.50	(c)	5.00-6000	5.00-6000		20	Y	Y	Av	Mag	Car	O-T	G	Hc
	20	GS, Pu, Cs, BI	2	Ver	1	2 1/2 x 1 1/2	6.97	6.00	(c)	5.50-6200	5.50-6200		20	Y	Y	Av	Mag	Car	Til	G,K	Hc
	5-30N	Chain Saws	2	Ver	1	2 1/2 x 1 1/2	8.40	5.50	(c)	6.00-6200	6.00-6200		30	Y	Ce	Av	Mag	Car	Til	G,K	Hc
	23	GS, Pu, BI	2	Ver	1	2 1/2 x 2 1/2	11.40	5.50	(c)	6.00-3600	6.00-3600		40	Y	Y	Av	Mag	Car	Own	G,K	Hc
	24	General Purpose	2	Ver	1	3x3	21.21	5.50	(c)	10.00-3600			125	Y	Y	Av	Mag	Car	Own	G,K	Hc
Jacobsen	J-100	Lawn Mowers	2	Hor	1	2x1 1/2	4.70	5.50		1.80-3600	1.63-3600	2.63-3600	19 1/2	Y	Av	Mag	Car	Til	G	Rc	
	J-100E	Lawn Mowers	2	Hor	1	2x1 1/2	4.70	5.50		1.80-3600	1.63-3600	2.63-3600	26	Y	Av	Mag	Car	Til	G	Ele	
	J-100V	Lawn Mowers	2	Ver	1	2x1 1/2	4.70	5.50		1.80-3600	1.63-3600	2.63-3600	19 1/2	Y	Av	Mag	Car	Til	G	Rc	
	J-100VE	Lawn Mowers	2	Ver	1	2x1 1/2	4.70	5.50		1.80-3600	1.63-3600	2.63-3600	26	Y	Av	Mag	Car	Til	G	Ele	
	J-200	Lawn Mowers	2	Hor	1	2x2	6.28	5.86		2.43-3600	2.20-3600	3.55-3600	56	Y	Av	Mag	Car	Til	G	Rc	
	J-200E	Lawn Mowers	2	Hor	1	2x2	6.28	5.86		2.43-3600	2.20-3600	3.55-3600	56	Y	Av	Mag	Car	Til	G	Ele	
	J-200V	Lawn Mowers	2	Ver	1	2x2	6.28	5.86		2.43-3600	2.20-3600	3.55-3600	56	Y	Av	Mag	Car	Til	G	Ele	



1956

GASOLINE ENGINES

SMALL

MAKE AND MODEL	Designed for Use	Number of Cycles	Type	No. of Cylinders	Bore and Stroke (In.)	Total Displacement (Cu. In.)	Compression Ratio (to 1)	Valve Location	ENGINE		Governor	Type	FUEL SYSTEM		Fuel Used	Starting Method			
									Horsepower				Ignition System Type	Type			Make		
									Rated at RPM	Continuous at RPM									
											Torque—Lb. Ft. at RPM	Weight (Lb.)							
											Used								
Continued from page 87																			
AIR COOLED—Continued																			
Lawn-Boy	C-12	Lawn Mowers	2	Hor	1 1/2 x 1 1/2	4.43			2.00-4000	1.75-3000	3.00-2800	15	Y	Ce	Mag	Car	G	Rr	
McCulloch	33-B	Chain Saws	2	Ver	1 1/2 x 1 1/2	3.30	7.20	Re	2.20-3600		2.60-4800	20	N		Mag	Car	Own	G	AR
	33-S	Chain Saws	2	Ver	1 1/2 x 1 1/2	3.30	7.20	Re	3.25-5500		2.70-5500	21	N		Mag	Car	Own	G	AR
	47	Chain Saws	2	Ver	1 1/2 x 1 1/2	4.71	7.00	(c)	3.30-5000		4.60-4000	30	Y	Os	Mag	Car	Own	G	AR
	4-30A	Chain Saws	2	Ver	1 1/2 x 1 1/2	5.30	6.75	(c)	4.80-6000		5.80-4800	31	Y	Os	Mag	Car	Own	G	AR
	73	Chain Saws	2	Ver	1 1/2 x 1 1/2	7.35	6.80	(c)	6.75-6500		6.70-4000	32	Y	Ce	Mag	Car	Own	G	AR
Onan	99	Pu, Cs, ED	2	Hor	1 1/2 x 2	9.82	6.50	(c)	8.00-5200		11.80-3600	56	Y	Ce	Mag	Car	Own	G	AR
	AK	Generator Sets	4	Ver	1 1/2 x 2 1/2	12.20	5.50	L	3.76-3600	2.82-3600	5.80-1800	74	(d)	Mag	Car	Cart	G	HEA	
	AJ	Generator Sets	4	Ver	1 1/2 x 2 1/2	14.90	6.25	L	5.10-3600	3.82-3600	8.00-2100	74	(d)	Mag	Car	Cart	G	BPA	
	LK	Generator Sets	4	Ver	1 1/2 x 3	24.69	5.84	L	5.10-1800	4.34-1800	14.90-1800	114	(d)	Mag	Car	Cart	G	HEA	
	CK	General Purpose	4	Op	2 1/2 x 2 1/2	38.80	6.20	L	10.10-3000	8.60-3000	10.00-3000	95	(d)	Mag	Car	MS	G	NgG	
	ACK	Generator Sets	4	Op	2 1/2 x 2 1/2	38.80	6.25	L	13.80-3600	10.00-3600	20.00-3600	125	Y	Me	Mag	Car	Til	G	RA
	VB	Generator Sets	4	Vec	2 1/2 x 2 1/2	45.70	6.25	L	19.25-3600	16.20-3600	29.80-2800	140	Y	Me	Mag	Car	Zen	G	Els
	CCK	GP, RF	4	Op	2 1/2 x 3	49.80	5.58	L	13.60-3000	11.50-3000	27.80-1800	129	(d)	Mag	Car	MS	G	HEA	
	CW	Generator Sets	4	Op	2 1/2 x 3	88.00	5.50	L	20.00-1800	16.50-1800	58.30-1800	420	Y	Fb	Mag	Car	Zen	G	HEA
Power Products	AV36-2032	General Purpose	2	Ver	1 1/2 x 1 1/2	3.60		Re	1.30-3400	1.30-3400	1.92-3100	12 1/2	Y	Fb	Mag	Car	Til	G	R
	AH36-1007	General Purpose	2	Hor	1 1/2 x 1 1/2	3.60		Re	1.30-3400	1.30-3400	1.92-3100	14 1/2	Y	Fb	Mag	Car	Til	G	AR
	AV36-2033	General Purpose	2	Ver	1 1/2 x 1 1/2	3.60		Re	1.40-3200	1.40-3200	2.00-3200	15	Y	Fb	Mag	Car	Til	G	AR
	AH36-1008	General Purpose	2	Hor	1 1/2 x 1 1/2	3.60		Re	1.40-3200	1.40-3200	2.00-3200	17	Y	Fb	Mag	Car	Til	G	AR
	AV47-2034	General Purpose	2	Ver	1 1/2 x 1 1/2	4.70		Re	1.90-3800	1.90-3800	2.67-3400	15	Y	Fb	Mag	Car	Til	G	R
	AH47-1009	General Purpose	2	Hor	1 1/2 x 1 1/2	4.70		Re	1.90-3800	1.90-3800	2.67-3400	15	Y	Fb	Mag	Car	Til	G	AR
	AV47-2035	General Purpose	2	Ver	1 1/2 x 1 1/2	4.70		Re	1.80-3200	1.80-3200	2.92-3400	15 1/2	Y	Fb	Mag	Car	Til	G	AR
	AH47-701	General Purpose	2	Hor	1 1/2 x 1 1/2	4.70		Re	1.80-3200	1.80-3200	2.92-3400	17	Y	Fb	Mag	Car	Til	G	AR
	AV47-1010	General Purpose	2	Hor	1 1/2 x 1 1/2	4.70		Re	1.80-3200	1.80-3200	2.92-3400	17 1/2	Y	Fb	Mag	Car	Til	G	AR
	V47-502	Lawn Mowers	2	Ver	1 1/2 x 1 1/2	4.70		Re	1.80-3400	1.80-3400	2.83-3200	13	Y	Av	Mag	Car	Til	G	AR
	V47-603	Lawn Mowers	2	Ver	1 1/2 x 1 1/2	4.70		Re	2.00-3400	2.00-3400	3.08-3200	17	Y	Fb	Mag	Car	Til	G	AR
	BV69-361	General Purpose	2	Op	2 1/2 x 1 1/2	6.90		Re	2.30-3300	2.30-3300	2.50-3400	27 1/2	Y	Fb	Mag	Car	Til	G	AR
	BH69-364	General Purpose	2	Op	1 1/2 x 1 1/2	6.90		Re	2.30-3300	2.30-3300	2.50-3400	27 1/2	Y	Fb	Mag	Car	Til	G	AR
	AV80-407	General Purpose	2	Ver	1 1/2 x 2	8.00		Re	3.40-3400	3.40-3400	5.50-3000	23 1/2	Y	Fb	Mag	Car	Til	G	AR
	AH80-410	General Purpose	2	Hor	1 1/2 x 2	8.00		Re	3.40-3400	3.40-3400	5.50-3000	26	Y	Fb	Mag	Car	Til	G	AR
Reo	MW-5200K	Lawn Mowers	4	Hor	1 1/2 x 1 1/2	6.65	5.43	L	2.25-4000	1.70-3500	3.20-3500	28 1/2	Y	Av	Mag	Car	Cart	G	AR
	MW-5210K	Lawn Mowers	4	Hor	1 1/2 x 1 1/2	6.65	5.43	L	2.25-4000	1.70-3500	3.20-3500	31 1/2	Y	Av	Mag	Car	Cart	G	AR
	MW-5220K	Snow Plows	4	Hor	1 1/2 x 1 1/2	6.65	5.43	L	2.25-4000	1.70-3500	3.20-3500	32	Y	Av	Mag	Car	Cart	G	AR
	MW-5230K	Lawn Mowers	4	Ver	1 1/2 x 1 1/2	6.65	5.43	L	2.25-4000	1.70-3500	3.20-3500	32	Y	Av	Mag	Car	Cart	G	AR
	MW-5240K	Lawn Mowers	4	Hor	1 1/2 x 1 1/2	6.65	5.43	L	2.25-4000	1.70-3500	3.20-3500	32	Y	Av	Mag	Car	Cart	G	AR
United	1 1/2 HP	General Purpose	4	Ver	1 1/2 x 2 1/2	11.08		L	2.25-4000	1.70-3500	3.20-3500	32 1/2	Y	Av	Mag	Car	Til	G	Pe
	2 HP	General Purpose	4	Ver	1 1/2 x 2 1/2	13.53		L				70	Y		Mag	Car	Til	G	Pe
	4 HP	General Purpose	4	Ver	1 1/2 x 2 1/2	14.89		L				75	Y		Mag	Car	Til	G	Pe
West Bend	2704	Lawn Mowers	2	Vec	1 1/2 x 1 1/2	3.76		Re	1.50-3600	1.50-3600	2.30-3600	18 1/2	Y	Av	Mag	Car	Til	G	R
	2756	AI	2	Hor	1 1/2 x 1 1/2	3.90		Re	2.80-4000	2.80-4000	3.50-4000	15	N		Mag	Car	Til	G	R
	2777	GS, Ac, Pu, Af	2	Hor	1 1/2 x 1 1/2	4.90		Re	2.30-3600	2.30-3600	3.80-3600	17 1/2	Y	Av	Mag	Car	Til	G	R
	2771, 2772, 2774, 2775	Chain Saws	2	Hor	1 1/2 x 1 1/2	5.10		Re	2.80-4000	2.80-4000	3.50-4000	15	N		Mag	Car	Til	G	Rc
	2779	Chain Saws	2	Hor	1 1/2 x 1 1/2	5.10		Re	2.80-4000	2.80-4000	3.50-4000	15	N		Mag	Car	Til	G	R
	2778	Chain Saws	2	Hor	1 1/2 x 1 1/2	5.10		Re	2.80-4000	2.80-4000	3.50-4000	17	N		Mag	Car	Til	G	R
Wisconsin	ACN	General Purpose	4	Ver	1 1/2 x 2 1/2	14.88	5.90	L	5.60-3600	4.50-3600	8.60-2600	76	Y	Ce	Mag	Car	MS	G	R
	BKN	General Purpose	4	Ver	1 1/2 x 2 1/2	17.80	5.31	L	6.80-3600	5.50-3600	10.00-2600	76	Y	Ce	Mag	Car	MS	G	R
	AEN	General Purpose	4	Ver	1 1/2 x 3	23.00	4.88	L	6.10-2600	4.90-2600	13.00-2000	130	Y	Ce	Mag	Car	Zen	G	R
	AEN	General Purpose	4	Ver	1 1/2 x 3	23.00	5.34	L	8.30-3400	6.64-3400	15.40-2200	110	Y	Ce	Mag	Car	Zen	G	R
	AFH	General Purpose	4	Ver	1 1/2 x 4	33.20	4.60	L	7.20-2200	5.75-2200	19.80-1400	180	Y	Ce	Mag	Car	Zen	G	Hc
	ACH	General Purpose	4	Ver	1 1/2 x 4	38.50	4.60	L	8.40-2200	6.70-2200	24.20-2200	180	Y	Ce	Mag	Car	Zen	G	Hc
	AHH	General Purpose	4	Ver	1 1/2 x 4	41.30	4.60	L	9.20-2200	7.40-2200	25.80-1300	180	Y	Ce	Mag	Car	Zen	G	Hc
	TE	General Purpose	4	Ver	2 1/2 x 3 1/2	45.90	5.44	L	11.20-2600	9.00-2600	27.10-1600	220	Y	Ce	Mag	Car	Zen	G	Hc
	TF	General Purpose	4	Ver	2 1/2 x 3 1/2	53.90	5.50	L	14.60-2800	11.68-2600	32.50-1700	220	Y	Ce	Mag	Car	Zen	G	Hc
	TFD	General Purpose	4	Ver	2 1/2 x 3 1/2	53.90	5.50	L	15.00-3000	12.00-3000	32.50-1700	220	Y	Ce	Mag	Car	Zen	G	Hc
WATER COOLED																			
Kermath	Sea Pup	Marine	4	Ver	1 1/2 x 2 1/2	18.00	6.00	L	5.00-3200		10.00-2700	63	Y	Ce	Mag	Car	Til	G	ER
	Sea Twin	Marine	4	Ver	2 1/2 x 2 1/2	30.00	6.20	L	10.00-3000		18.00-2700	109	Y	Ce	Mag	Car	Til	G	ER
United	2R14	AI	4	Hor	1 3/4 x 4 1/2	37.30		L				195	Y	(e)	Mag	Car	Til	G,K,D	Hc
	3R20	AI	4	Hor	1 3/4 x 4 1/2	43.25		L				235	Y	(e)	Mag	Car	Til	G,K,D	Hc
	4R30	AI	4	Hor	1 3/4 x 4 1/2	49.75		L				245	Y	(e)	Mag	Car	Til	G,K,D	Hc
Universal	AFTC	Generator Sets	4	Ver	2 3/4 x 3 1/2	49.50	5.79	L	5.00-1200	6.00-1350	25.00-1200	385	Y	Me	BM	Car	Str	G	HE
	AFC	GS, In	4	Ver	4 3/4 x 3 1/2	99.00	5.79	L	19.00-1800	18.00-1800	53.00-1800		Y	Me	BM	Car	Str	G,Ng	HE

ABBREVIATIONS

*—Reduction gear model.
 (a)—65 pounds per square inch.
 (b)—Inclined 20° up from horizontal.
 (c)—Rotary intake valve in crankcase.
 (d)—Flyweights on camshaft.
 (e)—Automatically controlled by fly-wheel.
 Ac—Air compressors.
 Af—Auxiliary farm implement equipment.
 Am—Amal.
 AR—Automatic rewinding rope.
 Av—Air vane.
 Bl—Blowers.
 BM—Battery and magneto.
 BP—Belt or pulley.
 BPA—Belt, pulley or automatic rewinding rope.
 BPE—Belt, pulley, pedal or electric.
 BR—Belt, pulley or recoil.
 Car—Carburetor.
 Cart—Carter Carburetor Corp.
 Ce—Centrifugal.
 Cs—Chain saws.
 CTZ—Carter, Tillotson or Zenith.
 D—Distillate.
 ED—Earth drills.
 Ele—Electric.
 ER—Electric or rope.
 ERA—Electric, rope or automatic rewinding rope.
 Fb—Flyball.
 Fw—Flyweight.
 G—Gasoline.
 GP—General purpose.
 GS—Generator sets.
 Hc—Hand crank.
 HE—Hand crank or electric.

HEA—Hand crank, electric or automatic rewinding rope.
 Hor—Horizontal.
 HR—Hand crank or rope.
 I—Valves in head.
 In—Industrial.
 K—Kerosene.
 L—"L" head, valves at side.
 Lm—Lawn mowers.
 MA—Mechanical or air vane.
 Mag—Magnet.
 Me—Mechanical.
 MS—Marvel-Schebler Carburetor Div.
 MV—Mixing valve.
 N—No or none.
 Ng—Natural gas.
 Ng G—Combination of natural gas and gasoline.
 O-C—Own or Carter.
 Op—Opposed.

Opt—Optional.
 O-T—Own and Tillotson.
 Os—Over speed.
 O-Z—Own and Zenith.
 Pe—Pedal.
 Pu—Pumps.
 R—Rope.
 RA—Rope or automatic rewinding rope.
 Re—Recoil.
 Re—Reed valves.
 RF—Refrigeration equipment.
 Rr—Recoil or rope.
 Str—Stronberg Carburetor Div.
 T—"T" head.
 Til—Tillotson Mfg. Co.
 Va—Valve.
 Vee—"V" type engine.
 Ver—Vertical.
 Y—Yes.
 Zen—Zenith Carburetor Div.

USE THESE

Free + Easy

INQUIRY CARDS

The Inquiry Card—How It Works

EACH month Motor Age's New Products Show Window describes dozens of fast-moving items and money and time saving equipment from the country's leading manufacturers of dependable automotive products.

When you want more free information on any of these products, simply mark a circle around the same number on the postcard as appears under the item described. You may circle as many items as you wish. Use either or both cards. Separate information will be sent to you on each item. Be sure to give your full name and address.

New Literature

93. Parts Booklet

Champ-Items, Inc.: This firm has published its replacement parts catalog for 1956. The book has fifty pages of illustrations and descriptive matter on the Champ-Items parts line. According to the company, the catalog may be obtained on request.

94. Transmission Tool Catalog

The New Britain Machine Co.: The 20-page catalog supplement published by this company features tools for internal and external adjustment, repair and overhaul of automatic transmissions. The tools described and illustrated
(Continued on next page)

Postcard valid for 90 days only

Frank P. Tighe, EDITOR MOTOR AGE

P.O. Box 76, Village Station, N.Y. 14, N. Y.

Please send me further information on the New Products, the code numbers of which I have circled below.

- | | | |
|-------------------------------|-------------------------|--------------------------|
| 93. Parts Booklet | 102. Car Spotter | 112. Merchandising Rack |
| 94. Transmission Tool Catalog | 103. Cold Solder | 113. Grease Fitting Caps |
| 95. Special Tool Manual | 104. Promotion | 114. Contact Burnisher |
| 96. Electrical Catalog | 105. Safety Brake | 115. Primer-Surfacer |
| 97. Lift Brochure | 106. Car Wash Tub | 116. Small Bore Rings |
| 98. Specifications Book | 107. Fire Extinguisher | 117. Rubber Lubricant |
| 99. Brake Fluid | 108. Starter Drives | 118. Impact Screwdriver |
| 100. Piston-Valve Cleaner | 109. Wiper Mark Remover | 119. Refinishing Outfits |
| 101. Beehive Lamp | 110. Weatherstrip | 120. Battery Charger |
| | 111. Tire Sealer | 121. Absorbent Cart |
| | | 122. Adjustable Wrench |

Your Name..... Your Title.....
 Your Company.....
 Your Business: Wholesaler..... Repair Shop..... Car Dealer.....
 Address..... (Street & No.)..... (City)..... (Zone)..... (State).....

Postcard valid for 90 days only

Frank P. Tighe, EDITOR MOTOR AGE

P.O. Box 76, Village Station, N.Y. 14, N. Y.

Please send me further information on the New Products, the code numbers of which I have circled below.

- | | | |
|-------------------------------|-------------------------|--------------------------|
| 93. Parts Booklet | 102. Car Spotter | 112. Merchandising Rack |
| 94. Transmission Tool Catalog | 103. Cold Solder | 113. Grease Fitting Caps |
| 95. Special Tool Manual | 104. Promotion | 114. Contact Burnisher |
| 96. Electrical Catalog | 105. Safety Brake | 115. Primer-Surfacer |
| 97. Lift Brochure | 106. Car Wash Tub | 116. Small Bore Rings |
| 98. Specifications Book | 107. Fire Extinguisher | 117. Rubber Lubricant |
| 99. Brake Fluid | 108. Starter Drives | 118. Impact Screwdriver |
| 100. Piston-Valve Cleaner | 109. Wiper Mark Remover | 119. Refinishing Outfits |
| 101. Beehive Lamp | 110. Weatherstrip | 120. Battery Charger |
| | 111. Tire Sealer | 121. Absorbent Cart |
| | | 122. Adjustable Wrench |

Your Name..... Your Title.....
 Your Company.....
 Your Business: Wholesaler..... Repair Shop..... Car Dealer.....
 Address..... (Street & No.)..... (City)..... (Zone)..... (State).....

New Products

Continued from Page 89

in the brochure are engineered for Hydra-Matic, Dynaflow, Powerglide, Fordomatic and Merco-matic transmissions, the company states. Many are multi-purpose tools for servicing a variety of automatic transmission makes and models, it is said.

95. Special Tool Manual

Kent-Moore Organization, Inc.: A 48-page GMC truck special service tool manual has been published by this firm. The book contains information on all "Rate-Maker" special tools required for service on GMC gasoline and diesel powered trucks. Fully illustrated, this catalog describes the tools for servicing brakes, clutches, fuel systems, engines and other assemblies.

96. Electrical Catalog

Cole-Hersee Co.: A 20-page catalog of electrical products for farm tractors, earth-mover and industrial equipment is now being distributed by this company. The catalog, contains illustrations and descriptions of switches, connectors, pilot and dash lamps, fuse and terminal blocks, and many other electrical products designed for rugged uses. In addition to original equipment products, the catalog features an extensive replacement listing of electrical components for all leading makes of tractors and similar equipment.

97. Lift Brochure

Oster Manufacturing Co.: Its new line of manually propelled, hand and battery-powered hydraulic lifts with capacities from 500 to 2000 lbs., are illustrated and described in an eight-page brochure recently released by this firm. The free literature contains more than two dozen photographs showing various models, important components, as well as application illustrations. Complete specifications for all models are also included.

98. Specifications Book

Delco-Remy Div. GM.: The 1956 edition of this company's test specifications booklet, has been published. The booklet has been revised to include the most recent specifications for all active models of Delco-Remy batteries, coils, distributors, generators, cranking motors, regulators and magnetic or solenoid switches. The list price of the booklet is 25¢, with a special price for quantities of ten or more.

BUSINESS REPLY CARD
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

Chilton's MOTOR AGE

P. O. Box 76,

Village Station,

New York 14, N. Y.

Readers Service Dept.

FIRST CLASS
PERMIT No. 36
Sec. 349, P. L. & R.
New York, N. Y.

BUSINESS REPLY CARD
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

Chilton's MOTOR AGE

P. O. Box 76,

Village Station,

New York 14, N. Y.

Readers Service Dept.

FIRST CLASS
PERMIT No. 36
Sec. 349, P. L. & R.
New York, N. Y.

New

PRODUCTS SHOW WINDOW

FOR FURTHER INFORMATION USE POSTCARD FACING THIS PAGE

99

Brake Fluid

Wagner Electric Corp.: This company is marketing Wagner



Lockheed brake fluid assortments. Some assortments include 12 oz. containers of either moderate or heavy duty fluid. Others combine 12 oz. containers of brake fluid with shop size 5-gallon containers and master cylinder refillers. All assortments include a metal-wire merchandiser for displaying one dozen 12 oz. cans of fluid.

100

Piston-Valve Cleaner

Practical Manufacturing Co.: This company has marketed a piston and valve cleaner that is said to eliminate the need for air compressors or other power sources. According to the maker, the portable machine will handle valves up to a 1/2-inch stem. A 1/3-horsepower motor provides the rotating force for the unit. The valve cleaning device on the KleeFlo Handi-Master can also

be removed and used on any standard shop lathe, it is stated.

101

Beehive Lamp

Grote Manufacturing Co., Inc.: A two-way beehive marker lamp has been added to this company's line of safety accessories. The lamp is said to give visibility to the front, side and rear. Grote's beehive lamps are available with



any combination of red, yellow, green or clear plastic lenses. Lenses are shatter-proof and fade-proof, according to the manufacturer.

102

Car Spotter

Edmill Products Co., Inc.: The E-Z coded car spotter is a pyramid shaped indicator with numbers on all sides. The device is intended to sit on top of cars in the service area for easy spotting. Coded color flags are attached to tell what the car needs in the way of service. Magnets hold the de-

vice in place and permit easy removal without damaging the car, it is said. The spotter is available with or without code flags.

103

Cold Solder

Atomized Materials Co.: This manufacturer has marketed a ready to use, all purpose cold solder. Called Kwik-Metal, the solder is said to be water proof, rust proof and low in cost. Used for metal filling and glazing, one pound of this material does the work of six pounds of lead, according to the manufacturer.

104

Promotion

Valvoline Oil Company: The ten point sales program for new car dealers, recently instituted by (Continued on page 92)



Win This Original Painting
See Page 40

this company, is based on a 33,000 mile Valvoline product performance guaranty. The promotion material offered, includes, point-of-sale aids, outdoor signs, office forms and various advertising and publicity programs. Details of the promotion are described in a folder being distributed by this company.

105 Safety Brake

Safety Brake Corporation: The safety brake marketed by this firm is claimed to provide braking power when regular hydraulic systems fail. According to the maker, the device functions when any unequalization occurs in the braking system, by dividing it into two sections. The damaged section is sealed off, assuring either front or rear wheel brakes. It is said that installation for all cars and trucks requires no special tools.

106 Car Wash Tub

Apex Electrical Mfg. Co.: A roll-around, all-purpose fibre glass tub for use in car washing, has been marketed by this firm. The mobile unit consists of a 20-gallon capacity tub set in a steel stand. The unit can be utilized for holding wiping cloths, liquids, and for many other daily work needs, the



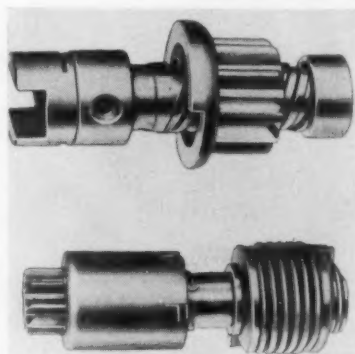
maker states. Claimed not to rust, chip, crack, dent or stain, the tub can be removed from its stand.

107 Fire Extinguisher

Astoria Manufacturing Co.: This firm has marketed a spray type fire extinguisher in an aerosol can. "Little Giant" is said to extinguish all types of small fires including electrical and gasoline blazes. Claimed to be non-toxic, non-corrosive and harmless to material ablaze, it is effective up to twelve feet. The item never deteriorates and has an indefinite shelf life, the maker states.

108 Starter Drives

Arrow Armatures Co.: A line of starter drives has been added to the rebuilt parts merchandised by this manufacturer. Clutch, screw and barrel type drives are in-



cluded. All are completely rebuilt with special attention given to the primary causes of trouble in each type, according to the company.

109 Wiper Mark Remover

New England Products, Inc.: This firm has marketed a complete kit for removing windshield wiper marks from windshields. The "Glazite" windshield mark remover kit includes a jar of Glazite compound and a No. 300 buffing wheel. Used with any standard drill, the buffing wheel combined with the compound is claimed to remove most marks which have resulted from faulty or lost wiper blades.

110 Weatherstrip

Inland Manufacturing Div., GMC: An improved door weatherstrip for automotive applications has been marketed by this firm.



It is a constant section of foam rubber with a synthetic coating and is said to be mechanically retained on the door. According to the maker, this synthetic coating has high abrasion resistance and high sunlight age resistance. Less door closing effort and the elimination of squeaks, while still maintaining a water-tight seal, are claims made for the item.

111 Tire Sealer

Pera Products Inc.: The tire sealing compound marketed by this firm is said to protect against the hazards of common punctures. Known as Pera tire seal, the compound is said to be effective in tube or tubeless tires. Pera covers the inside of the tire or tube with a mobile coating which seals a puncture quickly, the maker states. Said to last the life of the tire, the compound is installed by injection into the valve through a metal gun with compressed air.

112 Merchandising Rack

Kool Kooshion Manufacturing Co.: A car cushion merchandising rack has been marketed by this firm. Made of 5/16 inch silver painted rod, it is 48 inches high and 22 inches square at the base. The unit holds six Kool Kooshions of either regulator or king size
(Continued on page 136)



GROUP PHOTO of those attending the recent Philadelphia meeting of the Briggs & Stratton 4-cycle air-cooled engine Clinic. Briggs & Stratton vice pres. E. V. Oehler addressed the meeting attended by men servicing the firm's equipment in the Middle-Atlantic area. The Phila. meeting was set up in cooperation with the Automotive Equipment & Service Co. Similar engine clinics were held in January in New York City and Boston.

Analysis of Sales Manpower Important

A dealership's profits in the

1956 automobile market will be directly proportional to correct analysis of sales manpower needs in its markets, William A. Keller, Studebaker general sales man-

ager, Studebaker-Packard Corporation, said recently.

In a letter to all Studebaker dealers following up announcement of the company's new dealer aid program, Keller urged the dealer body to analyze sales staffs in relation to their market potential in order to realize maximum profits.

Noting that dealers must increase their sales forces with an eye on sales management expense and gross sales at the same time, he said that their sales staffs must be large enough to permit each salesman to spend at least 50 per cent of his time actively prospecting for new customers.

**The first signs of Spring
are the blooming idiots
along the highway.**

1956 New Passenger Car Registrations by Makes by States*

STATE AND MONTH		Buick	Cad- illac	Chev- rolet	Chrys- ler	Conti- nental	De Soto	Dodge	Ford	Hud- son	Lin- coln	Mer- cury	Nash	Olds- mobile	Pack- ard	Ply- mouth	Pon- tiac	Stude- baker	Misc. Dom.	For- eign	Total
Alabama	Jan.	636	76	2206	94	2	47	182	1435	20	25	285	30	432	16	498	413	73		29	6,479
Arizona	Jan.	61	27	130	0		6	33	71	2	3	18	9	32	4	54	34	11		7	510
Arkansas	Jan.	449	90	1884	103		63	217	1552	32	35	315	43	531	12	682	415	104		6	8,533
California	Jan.	5662	1521	10625	980	37	770	1596	9477	219	411	2863	649	3633	286	3406	3432	853	13	2287	67,127
Colorado	Jan.	461	135	1481	114	1	65	198	1135	38	86	238	86	435	32	332	339	81		34	5,333
Connecticut	Jan.	707	185	1481	241	6	140	377	1372	56	41	316	145	717	98	803	530	155	1	194	7,366
Delaware	Jan.	191	36	426	21		30	73	413		19	83	14	144	7	190	142	35		16	1,841
Dist. of Col.	Jan.	183	74	517	49	1	35	82	321	10	9	97	6	185	41	295	170	19		35	2,099
Florida	Jan.	1476	522	5139	254	11	182	461	3506	161	159	681	129	1467	77	959	936	198	5	208	16,501
Georgia	Jan.	559	110	1707	117	1	71	253	1525	6	30	341	27	537	23	598	566	78	2	10	6,581
Idaho	Jan.	201	46	406	36		19	68	273	27	13	82	39	144	12	86	107	44		1	1,607
Illinois	Jan.	3756	1141	8947	874	27	719	1224	6214	428	272	1781	575	3441	270	3434	2522	606	3	87	36,223
Indiana	Jan.	1751	380	3763	342	3	301	653	3223	102	102	779	221	1406	114	1422	1122	541	2	46	16,252
Iowa	Jan.	629	117	1876	127	4	81	238	1328	36	41	280	80	488	33	480	367	126	22	6	6,353
Kansas	Jan.	497	101	1509	93	3	60	170	1144	46	21	297	109	466	46	359	347	78	17	5	5,363
Kentucky	Jan.	374	45	1362	82	1	54	120	881	13	12	137	23	345	15	303	239	43	7	7	4,026
Louisiana	Jan.	597	117	2606	89	1	91	197	1602	14	41	331	45	624	38	571	633	135	23	3	7,755
Maine	Jan.	182	41	468	39		28	62	402	21	17	99	39	139	11	200	156	42	2	33	1,981
Maryland	Jan.	671	134	2331	175	1	149	328	1706	33	39	255	72	669	101	920	567	126	64	8	8,341
Massachusetts	Jan.	911	207	1699	205	1	167	312	1674	76	71	343	212	964	69	761	563	113	96	8	9,444
Michigan	Jan.	3399	1350	7717	482	13	509	927	5607	134	230	1115	300	2328	157	2055	1717	327	1	129	28,497
Minnesota	Jan.	643	153	1814	115	6	107	217	1237	56	39	344	133	563	33	421	331	150	23	6	6,385
Mississippi	Jan.	264	49	883	45		37	109	620	9	10	139	6	241	18	304	206	69	1		3,010
Missouri	Jan.	977	225	3125	155	5	184	282	2327	25	50	468	113	884	93	946	757	150	3	53	10,822
Montana	Jan.	128	39	397	36		15	62	300	18	13	86	22	130	15	98	88	28	10		1,486
Nebraska	Jan.	516	99	1188	108	2	51	164	928	24	35	186	54	332	43	367	307	75	8	8	4,499
Nevada	Jan.	62	25	153	17	1	16	28	160	1	8	41	6	61	7	43	35	15	17		696
New Hampshire	Jan.	101	18	306	27		19	43	290	15	4	66	35	94	5	103	113	29	1	20	1,238
New Jersey	Jan.	1927	516	3524	536	10	493	818	3040	81	143	750	202	1522	126	1798	1052	285	3	233	17,059
New Mexico	Jan.	184	28	454	32	1	18	47	306	3	14	77	9	100	4	94	126	21	5		1,523
New York	Jan.	1601	629	3100	612	11	376	628	2931	75	120	647	198	1567	119	1758	964	210	5	327	18,886
North Carolina	Jan.	783	155	2060	161	4	122	226	1986	36	35	326	92	639	41	762	543	145	6		20
North Dakota	Jan.	157	36	350	43		26	66	361	10	16	82	36	115	11	158	45	26	1		1,539
Ohio	Jan.	3052	799	6646	637	12	608	1281	5785	157	201	1179	329	2506	226	2366	2075	409	7	143	28,418
Oklahoma	Jan.	460	94	1446	99		58	145	1104	17	33	243	40	378	19	321	314	74	18		4,825
Oregon	Jan.	595	137	1691	86	2	100	206	1174	38	44	312	138	513	33	369	465	118	136		6,157
Pennsylvania	Jan.	2962	588	5742	722	10	632	1146	5201	179	146	1114	366	2247	260	3309	1662	463	36	191	26,906
Rhode Island	Jan.	235	74	479	58	2	40	79	411	17	12	100	49	230	10	256	120	46	1	26	2,245
South Carolina	Jan.	534	73	1629	81	3	70	202	1399	21	27	256	34	425	10	471	328	72	2	20	6,587
South Dakota	Jan.	211	48	824	48	1	34	87	542	17	18	86	39	195	13	162	118	40	1		1,285
Tennessee	Jan.	794	121	2220	104	3	104	240	1622	23	19	305	55	736	36	664	443	94	11	7	7,594
Texas	Jan.	2183	494	6313	277	12	209	536	4376	46	116	909	103	1715	51	1383	1441	249	74	20	48,487
Utah	Jan.	193	43	329	42		35	48	234	8	10	76	14	121	7	90	121	13	15		1,399
Vermont	Jan.	76	14	176	14		15	33	191	4	3	48	22	69	5	85	71	17	1	17	861
Virginia	Jan.	1019	183	2457	229	5	190	315	2058	85	39	425	98	726	66	1014	703	126	113		9,853
Washington	Jan.	746	143	1609	160	3	139	324	1407	48	48	324	194	443	40	560	392	129	5	197	8,939
West Virginia	Jan.	306	58	794	63	1	57	170	731	17	18	121	82	223	24	340	215	58	2	11	3,281
Wisconsin	Jan.	686	159	1357	109	2	123	226	1088	74	52	243	231	536	46	382	317	89	1	15	5,714
Wyoming	Jan.	115	33	304	24	1	11	46	167	5	10	40	13	76	10	63	62	10	3		1,004
Total	January, 1956	44803	11472	109342	9096	210	7496	15501	85775	2583	2942	19700	5527	36525	2833	36945	26721	7000	104	5073	431,648
Total	January, 1955	50588	12530	77810	13347		8963	20651	89614	2494	2179	21240	4645	39893	1890	47364	36614	6840	1003	2550	440,024

* Data from R. L. Polk & Co.

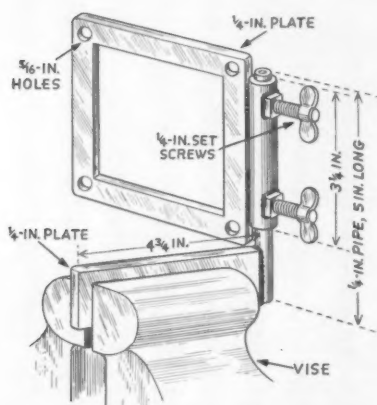
\$25 ShopKinks \$7.50

TIME AND WORK SAVING IDEAS ON CARS AND TRUCKS CAN PAY OFF. SEND YOURS IN NOW!

If you have an original idea for a special tool, a short cut on a job or any trick of value to others, write it down and if necessary make a rough sketch. Just make it clear. Send it to Motor Age. If your Kink is used it may bring you \$7.50 or \$25. All entries become the property of the Chilton Company. Because of the quantity of entries sent in, none can be returned.

\$25

Fixture Holds Carburetor And Prevents Valve Damage



The fixture I have made prevents bench damage to the secondary throttle valves on four-barrel carburetors. To make the fixture, I first cut a $\frac{1}{4}$ inch plate to fit the flange of a carburetor. A length of $\frac{1}{2}$ inch pipe, a smaller piece of $\frac{1}{4}$ inch plate and a $\frac{1}{4}$ inch pipe were also used. The small pipe slips into the larger pipe and the narrow plate is placed in a vise. The carburetor is bolted to the main plate for bench work. *Robert H. Theis, Box 335C, Route No. 1, Zillah, Washington.*

Timing Light Used To Find Engine Miss

I have found a quick way to check for an engine miss on cars with rubber spark plug insulators. First, I made a test lead with an ice pick on one end and a clamp on the other. Then, to use my method, I got a timing light with three terminals. Two terminals are hooked to the battery and the third (secondary) terminal is hooked to the test lead. With the engine idling or on fast throttle, the ice pick is poked through each plug cover. If the plug is good the light blinks, if it is bad there will be no light. *William Kawka, A & J Auto Ignition Co., 186 Broadway, Providence, Rhode Island.*

Method to Replace Wiper Transmission

It is not necessary to replace the complete windshield wiper transmission on '50 through '53 Buick, Oldsmobile and Cadillacs. The cables and pulley are not supplied separately, so you remove these from the new assembly by taking out one cover screw and swinging the cover to one side. Repeat this same operation on the car without removing the transmission. The windshield washer nozzle and hose operation or the seal around the windshield glass is not disturbed by the operation. This same method can be used to free up a binding

(Continued on page 96)



A POOCH FOR JOE ...

from CLARENCE BUDINGTON KELLAND

Dear Joe:

You kept your promise and I'm keeping mine. So here is the pup from the last litter. May you enjoy him as much as I enjoy driving my car since you overhauled it!

You know, what is under the hood of my car is a mystery to me, so I'm always amazed at the speed and efficiency with which you experts find what is wrong and set it right.

I hope that the motoring public appreciates as much as I do the splendid service performed by trained repairmen like yourself. We applaud our doctors and lawyers and scientists for their achievements. We understand the long training

they must undergo before they master their professions.

But I wonder how many of us realize the apprenticeship you "Doctors of Motors" must serve. I think very few of us appreciate the knowledge and skill you must come to possess before you can cure a sick engine and keep it running as good as new. What would we do without you fellows?

I'm delighted to express my thanks to you for the efficient service you have given me in keeping my car in condition, prolonging its life—and perhaps prolonging my own by seeing to it that my automobile is always safe to drive.

Sincerely

Clarence Budington Kelland

Better mechanics everywhere install

PERFECT CIRCLE

2-in-1 Chrome Piston Rings

THE STANDARD OF COMPARISON

Perfect Circle Corporation, Hagerstown, Ind. The Perfect Circle Co., Ltd., Toronto

This dramatic salute to the Doctors of Motors who keep America on wheels is an adaptation of a Perfect Circle ad that appeared in the March 24 issue of The Saturday Evening Post reaching over 16,000,000 readers.

Shop Kinks Continued from Page 94

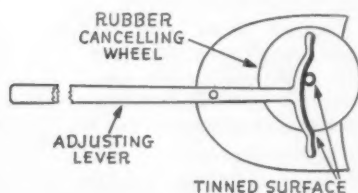
shaft. Here also you don't have to remove the cables from the driver assembly. Just have the wipers turned on and the engine running. *Wessel Fleming, Drennan Motor Car Co., 401 S. 20th St., Birmingham, Alabama.*

Compression Check Spots Faulty Lifter

Occasionally we have a job where an engine with hydraulic lifters has developed a miss. The compression at cranking speed will read 120-140 but still the engine will miss. We have found that by starting up the engine with the spark plug out of the suspected cylinder and then checking the compression with the engine running, the compression will drop to 40-60, indicating the faulty lifter. This method has saved many hours of diagnosis in our shop. *Harold Myers, Kenney Motor Co., Lawton, Oklahoma.*

Cures Turn Signal Problem With Solder

Occasionally the turn signal lights on 1952 Chevrolets and earlier, and similar model signals, will not cancel out. To cure this trouble I remove the lever and rubber canceling wheel. Then, with a little solder, tin the contact surface of the lever and wheel spindle. The mated tinned surfaces will then provide sufficient friction so that the small shaft of the canceling



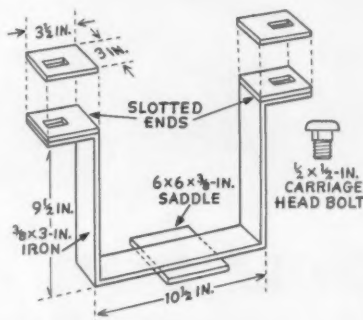
wheel will not slip. This also provides for a lighter adjustment of the canceling wheel against the hub of the steering wheel. *Keith W. Mason, Thiele Motor Co., Waudon, Iowa.*

Simple Method Helps Speed Manifold Seating

Seating the manifolds correctly the first time, when replacing them on 6 cylinder Chevrolets, is easier if the split rings are, first, positioned with the split up. After which the manifold is drawn snugly to the head. Tap the rings with any thin tool and they will snap into place. *Henry Josephs, Box 22, Gardenville, Penna.*

Adjustable Jig for Jacking Up Engines

Due to the possibility of damage to the engine of 1955 and '56 Pontiac's it is not a good idea to jack up the engine by the oil pan. Shown is an adjustable jig I have made for holding engines up while



the automatic transmission is being removed. Though designed primarily for Pontiacs it will work on most makes because of the adjustable feature. *Harold Myers, John Seyac Pontiac, Hannibal, Mo.*

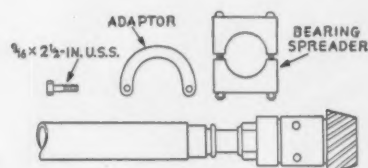
Method Helps Speed Oil Seal Installation

When installing a new pump housing seal on the Power Flite transmission, Hy-Drive, or torque converter, it is necessary to have the new seal protrude evenly from the pump housing. To accomplish this, place the seal in position on the pump housing. Then place the snap ring over the seal in the housing to act as a spacer. Now place

the sleeve on top of the seal. With the regular seal drift, drive the oil seal flush against the snap ring. This gives the correct protrusion of the oil seal which is installed evenly around the housing in this manner. *Rudy Wachtfeill, 11318 Methyl Ave., Cleveland 20, Ohio.*

Removes Pinion Without Using A Special Puller

I find that the removal of a pinion from the drive shaft on a Buick can be done easily without



a special puller. I do the job with a Ford rear hub adapter from my shop hub puller kit, a bearing spreader and two 9/16 x 2 1/2 inch standard thread bolts. To do the job, place the bearing spreader over the splined pinion shaft and against the pinion nut. Tighten these together. Then slip the hub puller adapter (with the bolts inserted in the holes up to the end of the threads) into the slot in the end of the drive shaft. By backing the two bolts out the pinion will be pressed from the shaft. *C. W. Cox, C & M Motors, Box 511, White Salmon, Washington.*

Discarded Choke Wire Removes Stuck Lifters

Sometimes, hydraulic valve lifters are hard to remove (due to carbon buildup) from six cylinder Chevrolets and straight eight Buicks. I get them out quickly, as follows: I cut a six inch length from a discarded choke wire and bend the end into a slight hook. Then, I slip it into the hole at the top of the lifter. With alternate motions, a screwdriver is pushed down on the lifter and the wire is pulled up. The lifter works out easily this way. *Robert J. Olsen, Hockett & Olsen Bros., Winslow, Washington.*

This full-page color ad in the April 14th issue of THE SATURDAY EVENING POST features MoPar products most needed by car owners this spring.

Current Passenger Car Price, Weight and Body Table

Following are prices at factory for cars with standard equipment as of March 26, 1956.
State or local taxes, transportation and finance charges and optional equipment are extra.

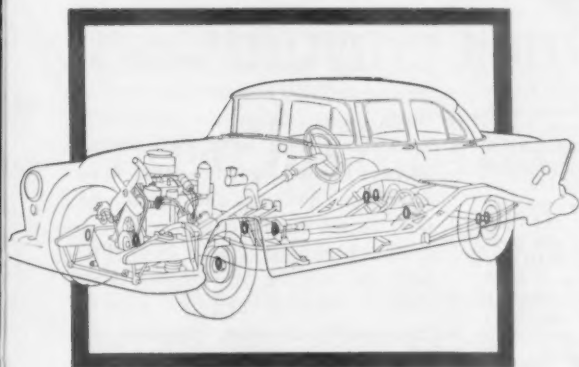
BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Delivered Price at Factory including Federal Taxes	Shipping Weight	BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Delivered Price at Factory including Federal Taxes	Shipping Weight	BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Delivered Price at Factory including Federal Taxes	Shipping Weight	BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Delivered Price at Factory including Federal Taxes	Shipping Weight
AMERICAN MOTORS CORP.					CHRYSLER CORP. cont'd					FORD MOTOR CO. cont'd					GENERAL MOTORS, cont'd				
HUDSON					PLYMOUTH†					LINCOLN, Cont'd					CHEVROLET, Cont'd				
Wasp					Plaza 6	1624	132	1756	3030	Premiere	4212		4362		Two-Ten, 8 cyl.	1837	170	2007	3157
Super Sed., 4d.	2179	201	2380	3264	Bus. Coupe	1716	139	1855	3100	Coupe	4212		4362		Sedan, 2d	1877	173	2050	3192
Hornet-6					Club Sedan	1756	142	1898	3145	Sedan, 4d	4347		4362		Sedan, 4d	1892	174	2066	3162
Super Sed., 4d.	2504	225	2729	3545	Savoy 6					Convertible					Delray Coupe	1977	181	2158	3184
Cust. Sed., 4d.	2737	241	2978	3636	Slub Sedan	1808	146	1954	3125	Mercury					Sport Coupe	1977	181	2158	3184
Cust. H. T., 2d	2846	249	3095	3646	Sedan, 4d	1848	149	1997	3160	Medalist					Sport Sedan	2027	185	2212	3242
Hornet-V8					Sedan, 4d	1945	156	2101	3155	Tudor Sedan	2036		3430		Sta. Wagon, 2d	2117	193	2310	3324
Cust. H. T., 2d	2986	259	3245	3862	Sport Coupe	1945	156	2101	3155	Sedan, 4d	2091				Sta. Wagon, 4d	2162	196	2358	3361
Cust. H. T., 2d	3119	269	3388	3872	Belvedere 6					Hardtop, 2d	2161				Sta. Wagon, 9p	2242	201	2443	3480
METROPOLITAN*					Club Sedan	1886	152	2038	3125	Custom					Bel Air, 8 cyl.	1942	178	2120	3177
Hardtop			1445	1825	Sedan, 4d	1926	155	2081	3170	Sedan, 2d	2126		3505		Sedan, 2d	1982	181	2163	3211
Convertible			1469	1785	Sport Coupe	2023	162	2185	3165	Sedan, 4d	2181		3520		Sedan, 4d	1982	181	2163	3211
NASH					Sport Sedan	2086	167	2253	3270	Hardtop, 2d	2251		3560		Sport Coupe	2082	189	2271	3212
Statesman 6					Suburban 6					Phaeton, 4d	2316				Sport Sedan	2132	193	2325	3260
Super Sed., 4d.	2146	199	2345	3199	De Luxe, 2d	2007	161	2168	3285	Convertible	2451				Convertible	2237	202	2438	3320
Ambass., 6					Custom, 2d	2073	166	2239	3355	Sta. Wag., 6p	2471		3790		Sta. Wagon, 4d	2367	210	2577	3496
Super Sed., 4d.	2425	219	2644	3555	Custom, 4d	2116	169	2285	3375	Sta. Wag., 8p	2561		3880		Sta. Wagon, 2d	2482	221	2703	3342
Ambass. V8					Sport, 4d	2274	181	2455	3420	Monterey					Corvette				
Super Sed., 4d.	2716	240	2956	3748	Plaza 8					Sedan, 4d	2316		3570		Corvette, 8 cyl.	2900	245	3145	2764
Cust. Sed., 4d	2939	256	3195	3846	Bus. Coupe	1720	139	1859	3170	Hardtop, 2d	2386		3590		Convertible				
Cust. Hd. Top	3072	266	3338	3854	Club Sedan	1812	146	1958	3250	Sport Sed., 4d	2406		3650		Oldsmobile				
RAMBLER-6					Sedan, 4d	1852	149	2001	3275	Phaeton, 4d	2451				Series 88				
DeL. Sed., 4d.	1642	153	1795	2891	Savoy 8					Sta. Wag., 8p	2708		3885		Sedan, 2d	2206			3691
Super Sed., 4d.	1743	162	1905	2906	Club Sedan	1904	153	2057	3255	Hardtop, 2d	2511		3620		Sedan, 4d	2266			3748
Cust. Sed., 4d.	1854	171	2025	2929	Sedan, 4d	1944	156	2100	3295	Sport Sed., 4d	2531		3610		Sedan, 4d	2270			3741
Cust. Hd. Top	2008	182	2190	2990	Sport Coupe	2041	163	2204	3275	Phaeton, 4d	2576		3725		Holiday Sed.	2437			3797
Cus. Sta. Wgn.	2106	189	2295	3110	Belvedere 8					Convertible	2636				Super 88				
CHRYSLER CORP.					Club Sedan	1982	159	2141	3285	GENERAL MOTORS CORP.					PONTIAC				
CHRYSLER					Sedan, 4d	2022	162	2184	3325	BUICK					Chieftain 860				
Windsor	2606	205	2811	3900	Sport Coupe	2119	169	2288	3320	Special 4d	2111	202	2313	3750	Sedan, 2d	2041	2236	3452	
Sedan, 4d	2638	207	2845	3910	Sport Sedan	2182	174	2356	3415	Sedan, 2d	2186	205	2372	3790	Sedan, 4d	2085	2294	3512	
Nassau, 2d	2765	217	2982	3920	Conv. Coupe	2268	181	2449	3435	Sedan, 4d	2204	209	2413	3775	Sedan, 4d	2085	2294	3512	
Newport, 2d	2846	223	3069	3990	Suburban 8					Riviera, 2d	2204	209	2413	3775	DeL. Hol. Cpe.	2182	2366	3512	
Conv. Coupe	3039	237	3276	4100	De Luxe, 2d	2103	188	2291	3460	Riviera, 4d	2270	214	2484	3860	DeL. Hol. Sed.	2344			4167
Twn. & Cty.	3263	256	3539	4290	Custom, 2d	2169	173	2342	3500	Conv. Cpe.	2467	229	2696	3880	Conv. Coupe	3420			4325
New Yorker					Sport, 4d	2370	188	2558	3605	Est. Wagon	2500	231	2731	3945	PONTIAC				
Sedan, 4d	3449	271	3720	4110	Fury 8					Century 60					Chieftain 860				
Newport, 2d	3609	283	3892	4175	Sport Coupe	2629	208	2837	3650	Riviera, 2d	2660	258	2918	3890	Sedan, 2d	2041		2236	3452
St. Regis	3650	286	3936	4175	FORD MOTOR CO.					Riviera, 4d	2717	263	2980	4000	Sedan, 4d	2085		2294	3512
Newport, 4d	3749	293	4042		CONTINENTAL					Est. Wagon	2932	279	3211	4080	Catal. Cpe.	2182		2366	3512
Conv. Coupe	3880	303	4183	4360	FORD					Conv. Cpe.	2979	282	3261	4045	Catal. Sedan	2230		2439	3577
Twn. & Cty.	4141	323	4464	4460	HARDTOP					Super 50					Sta. Wagon, 2d	2346		2564	3612
Sport Coupe	4044	315	4359	4145	Mainline 6					Riviera, 2d	2884	275	3159	4140	Sta. Wagon, 4d	2424		2648	3707
DE SOTO:					Bus. Tudor	1727	3087			Riviera, 2d	2927	278	3205	4200	Chieftain 870				
Firemodel					Tudor Sedan	1828	3032			Sedan, 4d	2927	278	3205	4200	Sedan, 4d	2202		2409	3512
Sedan, 4d	2434	194	2628	3780	Fordor Sedan	1874	3127			Riviera, 4d	3010	285	3295	4265	Sedan, 4d	2264		2476	3512
Seville, 2d	2485	198	2684	3800	Customline 6					Conv. Cpe.	3200	299	3499	4340	Catal. Cpe.	2264		2476	3512
Seville, 4d	2578	205	2783	3920	Tudor Sedan	1932	3107			Roadmstr. 70					Catal. Sedan	2314		2530	3577
Sportsman, 2d	2598	207	2805	3835	Fordor Sedan	1979	3147			Sedan, 4d	3148	310	3458	4280	Sta. Wagon, 4d	2513		2744	3657
Sportsman, 4d	2690	214	2904	3945	Victoria, 2d	2072				Riviera, 2d	3230	316	3546	4235	Sedan, 4d	2308		2523	3577
Conv. Coupe	2809	223	3032	4080	Fairlane 6					Riviera, 4d	3324	323	3647	4355	Star Chief 8				
Sta. Wagon	3078	243	3321	4095	Tudor Sedan	2026	3107			Conv. Cpe.	3335	324	3659	4395	Sedan, 4d	2308		2523	3577
Fireline					Fordor Sedan	2072	3147			CADILLAC					Cust. Cat. Cpe.	2436		2661	3567
Sedan, 4d	2844	226	3070	3880	Victoria, 2d	2173	3202			Series 62					Cust. Cat. Sed.	2501		2731	3647
Sportsman, 2d	3055	242	3297	3905	Victoria, 4d	2227				Coupe	3864	332	4196	4430	Conv. Coupe	2594		2823	3797
Sportsman, 4d	3134	248	3382	3970	Crwn. Victoria	2316	3217			Sedan	3953	338	4291	4420	Cust. Sta. Wgn.	2866		3124	3642
Conv. coupe	3239	256	3495	4075	Sunliner	2338	3312			Coupe de Ville	4260	359	4619	4445	STUDE-PACK. CORP.				
Pace Car	3305	261	3566	4070	Crn. Vct. Trnsp.	2385	3227			Sedan de Ville	4300	368	4748	4550	CLIPPER				
Adventurer	3410	269	3679	3870	Sta. Wgns. 6	2163	3330			Convertible	4392	369	4761	4645	Sedan, DeL., 4d	2505	226	2731	3955
DODGE*					Ranch Wagon					Eld. Seville	4604	487	5551	4685	Sedan, Sup. 4d	2631	235	2866	4010
Coronet, 6					Cust. Ranch	2228	3345			Eld. Biarritz	4604	487	5551	4680	Hardtop, Sup.	2677	239	2916	4035
Club Sedan, 2d	1961	160	2121	3250	Ctry. Sed., 6p	2275	3420			Series 60					Sedan, Cus. 4d	2826	249	3069	4070
Sedan, 4d	2029	165	2194	3295	Ctry. Sed., 8p	2407	3485			Sedan, 75	4637	405	5042	4610	Constellation	2908	256	3164	4070
Coronet, V8					Parklane	2407	3360			Sedan, 8p	6090	518	6608	5050	PACKARD				
Club Sedan	2061	167	2228	3380	Ctry. Squire	2511	3495			Imperial Sedan	6290	533	6823	5130	Executive				
Sedan, 4d	2129	172	2301	3435	Mainline, V8					Chevrolet					Tour. Sed., 4d				
Lancer	2187	177	2364	3430	Bus. Tudor	1820	3198			One-Fifty, 6cyl.	1530	150	1730	3127	Coupe, 2d				
Lancer, 4d	2253	185	2478		Tudor Sedan	1921	3143			Utility Sedan	1665	157	1822	3164	Patrician	3826	334	4160	4255
Convertible	2410	194	2604	3600	Fordor Sedan	1967	3238			Sedan, 2d	1705	160	1865	3206	Packard 400	3855	335	4190	4290
Royal, V8					Victoria, 2d	2072	3258			Sta. Wagon, 2d	1985	182	2167	3309	Caribbean	5069	426	5495	4580
Sedan, 4d	2322	182	2439	3475	Fairlane V8					Sedan, 4d	1745	163	1908	3177	Carib. Conv.	5534	461	5995	4960
Lancer, 4d	2428	195	2623		Tudor Sedan	2119	3250			Two-Ten, 6cyl.					Champion				
Lancer, 4d	2424	195	2619	3505	Fordor Sedan	2165	3290			Sedan, 4d	1785	166	1951	3212	Sedanet, 2d	1678	163	1841	2780
Convertible	2628	210	2838	3630	Victoria, 2d	2266	3345			Delray Coupe	1800	167							

always replace
install **C/R**

NEVER RE-USE
factory-recommended oil seals



Every car you service is a profit jackpot in oil seal replacements



on every car-**10** or more spots to
hit your oil seal jackpot!

Oil seals cost so little . . . mean so much in protection for your work . . . and your customers' cars.

Every service job that comes your way represents a jackpot for profit in replacement oil seals. Follow our nationally advertised recommendation: check the car's front wheel bearings *every 5,000 miles* . . . and replace the oil seals with new ones. In fact, every time you pull a wheel, check a brake cylinder or do any engine overhaul work, replace the old oil seals. It's cheaper, and safer. And, if they're C/R oil seals, you know they're manufactured to the same rigid specifications as the original oil seals installed by the vehicle manufacturer and engine builder. They always fit right . . . seal right!

A C/R oil seal replacement job is easier to sell . . . they cost only a few cents. Ask your supplier right away for the facts about C/R oil seals.

TIME-SAVING INSTALLATION TOOL KIT OFFER

Get this! Service shops can get this easy-to-use tool kit for installing front wheel seals at tremendous savings. This kit saves minutes on every front wheel job, insures correct seating of the new seal and prevents damage to the seal in installation. This versatile tool also gauges wear . . . an important help in selling new oil seals. Kit includes a rawhide mallet driving tool and assorted converters. Ask your supplier, or write us for details.

CHICAGO RAWHIDE



MANUFACTURING COMPANY

REPLACEMENT DIVISION Elgin, Illinois

World's Largest Manufacturer of Oil Seals
for original equipment . . . now
offers the most complete replacement line!

**CHICAGO
RAWHIDE**

IN CANADA: Super Oil Seal Manufacturing Co., Ltd.
Hamilton, Ontario
EXPORT SALES: Geon International Corporation
Great Neck, New York

Engineering Highlights Continued from Page 41

isolators are beginning to devote their spare time to the problem and its solution. Some of the solutions aired to date would be ludicrous were it not for the threat of legislation with teeth in it.

Like a breath of fresh air comes an official explanation of what horsepower means to the car owner. It is contained in "The Horsepower

Story," one of a series of limited distribution information booklets published by the Engineering Division of Chrysler Corp.

Higher horsepower is a vital sales feature of many cars today. It means more performance for the car owner. It means that, even with all its accessories, its automatic drive, its roominess and

solidity and comfort, the new car will move more briskly through heavy traffic, or accelerate quickly when entering a crowded highway. It means that one can pass quickly and surely on crowded highways and maintain steady cruising speeds over all kinds of terrain.

What about smaller engines? Who will be the first to boast to the public that his make of luxurious, expensive cars offers 100 less horsepower than his competition?

Chrysler Corporation firmly believes that horsepower will continue to *RISE* in the future. They explain that related benefits have come with higher horsepower. Lightly-loaded engines can deliver more ton-miles per gallon than ever before. Since full power is required only on demand, lower

A man owes it to himself to become successful. Once successful, he owes it to the Bureau of Internal Revenue.

axle ratios permit engines to run slower, thus quieter. This reduces vibration and noise, makes cars more restful to drive, contributes to longer life.

Chrysler shows that cars need more power today because most cars are heavier, bigger and stronger. They are literally loaded with accessories — automatic transmissions, power steering, power brakes, power seats and windows, heaters and radio, as well as air conditioning.

The big, soft tires—and they will be bigger in cross-section soon — which help to give a smoother ride can consume as much as 12 horsepower at 60 mph. So we have the element of higher rolling resistance.

Accessories not only add weight, they also use power. Some is absorbed by the fan, water pump, generator, oil pump, power steering pump, exhaust system, and air conditioning system compressor. All of these accessories, together with automatic transmissions and bigger generators, subtract from

(Continued on page 102)

Announces
THE MOST ADVANCED DESIGNS IN
CONTACT SETS



HEAVY DUTY
Ventilated
CONTACT POINTS
TO FIT FORD • MERCURY • LINCOLN



Always install a new P & D Condenser with P & D Contacts. P & D has a complete line of matched Contact Sets (Pre-assembled for fast and accurate installation) and Condensers to fit the ignition systems of all cars and trucks. P & D means Performance and Dependability!

P & D Heavy Duty VENTILATED Contact Sets will give smoother and better engine performance over a longer period of time than any other type set. Better contact surface is obtained and the transfer of metal deposits from one contact to the other is eliminated. Under normal conditions these P & D Contact Sets should give up to three times longer service. That's P & D Quality!

See Your P & D Catalog



GENUINE P & D PARTS

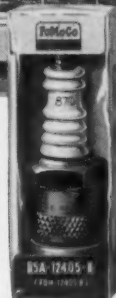
MANUFACTURING CO., INC.
Established 1920
19-02 Steinway St., Long Island City 5, N.Y.



Genuine Ford
Condensers



Genuine Ford
Distributor Points



Genuine Ford
Spark Plugs



Genuine Ford Oil Filter Elements
in a special draw-string package

Fast-moving Ford Parts move faster than ever

That's because new picture-windows tell your Ford-owning customers at a glance that you carry Genuine Ford Parts

Easy to display, easy to spot, these good-looking new packages for condensers, rotors, generator and starter brush sets and other Genuine Ford Parts build Ford parts and service business by building confidence in you.

Ford-owners see immediately that you've got the real article. And they figure that the man who carries the parts best for Fords will give the best service, too.

So get Genuine Ford Parts in the new display packages. Show them on counters and racks. Watch your Ford business climb.

GET THIS SIGN

Build Ford business with a Genuine Ford Parts oval. Ford owners watch for it. Mail coupon for full information.



PARTS AND SERVICE SALES DEPARTMENT

Ford Division, Ford Motor Company, Box 658, Dearborn, Mich.

Please send complete information telling me how independent garages can get a Genuine Ford Parts sign. I'd like to cash in on this, too!

FIRM NAME _____

INDIVIDUAL'S NAME _____

ADDRESS _____

CITY _____ STATE _____ H _____

engine power before it gets to the wheels.

Thus more power is needed just to maintain an acceptable level of performance wanted by the car owner.

Chrysler engineers then ask why performance is so important. The only logical answer is: It's important because people want it.

As a simplification, we can say that the "performance potential" of a given car is a function of maximum horsepower divided by car weight. Thus, we can say roughly that performance of any car may be doubled either by doubling engine power or by cutting the weight of the car in half. While it is not feasible to go as

far as to double the output of present day engines, it is undeniable that horsepower must be increased if overall performance is to be further improved.

At this point we come to the influence of "torque" in the power picture. The performance of many cars is good at low speeds but it drops off rapidly as the car gains speed. What causes this loss in performance with increasing car speed? First of all, increasing air drag and friction rob acceleration thrust. For example, the force required to overcome air resistance at 60 mph is four times greater than at 30 mph; 16 times as great at 120 mph.

Torque Drops Off

Equally important is the fact that in piston engines the value of torque drops off as engine speed increases. The maximum value of torque is generally developed at relatively low engine speeds, then drops off. Consequently, although the engine develops more horsepower as speed increases, the value of torque or thrust decreases. You can't escape this result because in its simplest terms, the numerical value of horsepower is torque times speed.

The situation can be summarized in this way: the mass of people want big, substantial cars with comfort features and accessories. To get acceptable performance, it remains necessary to keep engine horsepower high but at the same time so perfect design detail as to produce an improvement in torque rating. We might mention that during the past few years a number of companies have increased engine displacement just to attain this result.

The only other alternative would be to build small, low weight cars with the minimum of accessories and comfort features. Motor car producers have learned the hard way that the millions of car buyers are not impressed with that kind of package.

The greatest number of muscles in any member of the human body is found in the tongue; they require constructive exercise.

Springtime...



is Thermostat-

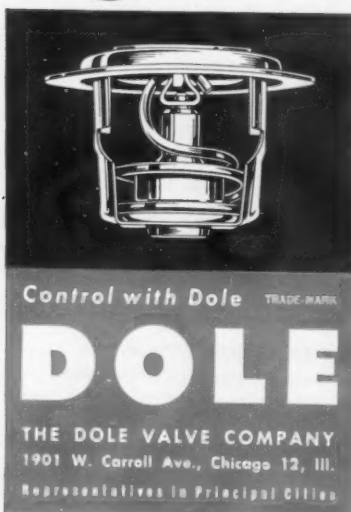
Testing Time

Springtime... when highways beckon again... when you service customers' cars for warm-weather driving... that's the time to suggest a thermostat test.

And you'd better have a good assortment of modern Dole Thermostats on hand. *Because all the high-compression V8 engines require accurate temperature control.* Dole DV Thermostats reduce engine wear and "ping"... and save gas and oil.

You'll satisfy your customers and make a nice profit besides... Better give your order to your Dole Jobber today.

DOLE THERMOSTATS
Now Standard Equipment on
13 Leading Cars and Trucks



50% more power



**THOR MODEL 1500
ORBITAL SPEEDSANDER**

This heavy duty orbital-motion electric Thor SpeedSander has wide use in refinishing work, for sanding, buffing, rubbing and polishing. Has 4 1/2" by 9" sanding area; uses sheet or wet abrasives. Ball-bearing construction. Light weight for easy handling.

Sanding metal demands this extra power!

THOR PORTABLE ELECTRIC SANDERS

AVAILABLE ON AN EASY PAYMENT PLAN

SANDING metal efficiently is a job for Thor Electric Sanders, not just ordinary sanders. The difference is in the power. Thor builds **EXTRA POWER** into the Thor armature, and triple-insulates that armature for long, rugged use. Then Thor delivers that **EXTRA POWER** through a transmission system of high quality tool steels and gearing, fully mounted on ball bearings.

Other important Thor advantages include light weight, compact design, and removable side handle for right or left hand use. Thor's handy

spindle lock permits fast disc changes. The exclusive Thor rubber tool rest protects tool and car finish.

Ask your Thor jobber for a demonstration—there's a Thor Electric Sander in every disc size and capacity you require. Ask him about Thor disc trimmers, discs, backing pads and other accessories. Thor Power Tool Company, Aurora, Ill.



THOR POWER TOOL COMPANY

Atlanta • Birmingham • Boston • Buffalo • Chicago • Cincinnati • Cleveland • Denver
Detroit • Houston • Los Angeles • Milwaukee • Newark • Long Island City, N.Y. • Philadelphia
Pittsburgh • St. Louis • San Francisco • Seattle • Toronto, Canada • Export Division, New York City



NEW, improved PEAK®
 Anti-freeze broke all
 sales records in '55!
 Here's why it's sure to
 add more satisfied cus-
 tomers...more profitable
 sales in '56!

TOP QUALITY makes PEAK the anti-freeze you can rec-
 ommend with confidence:

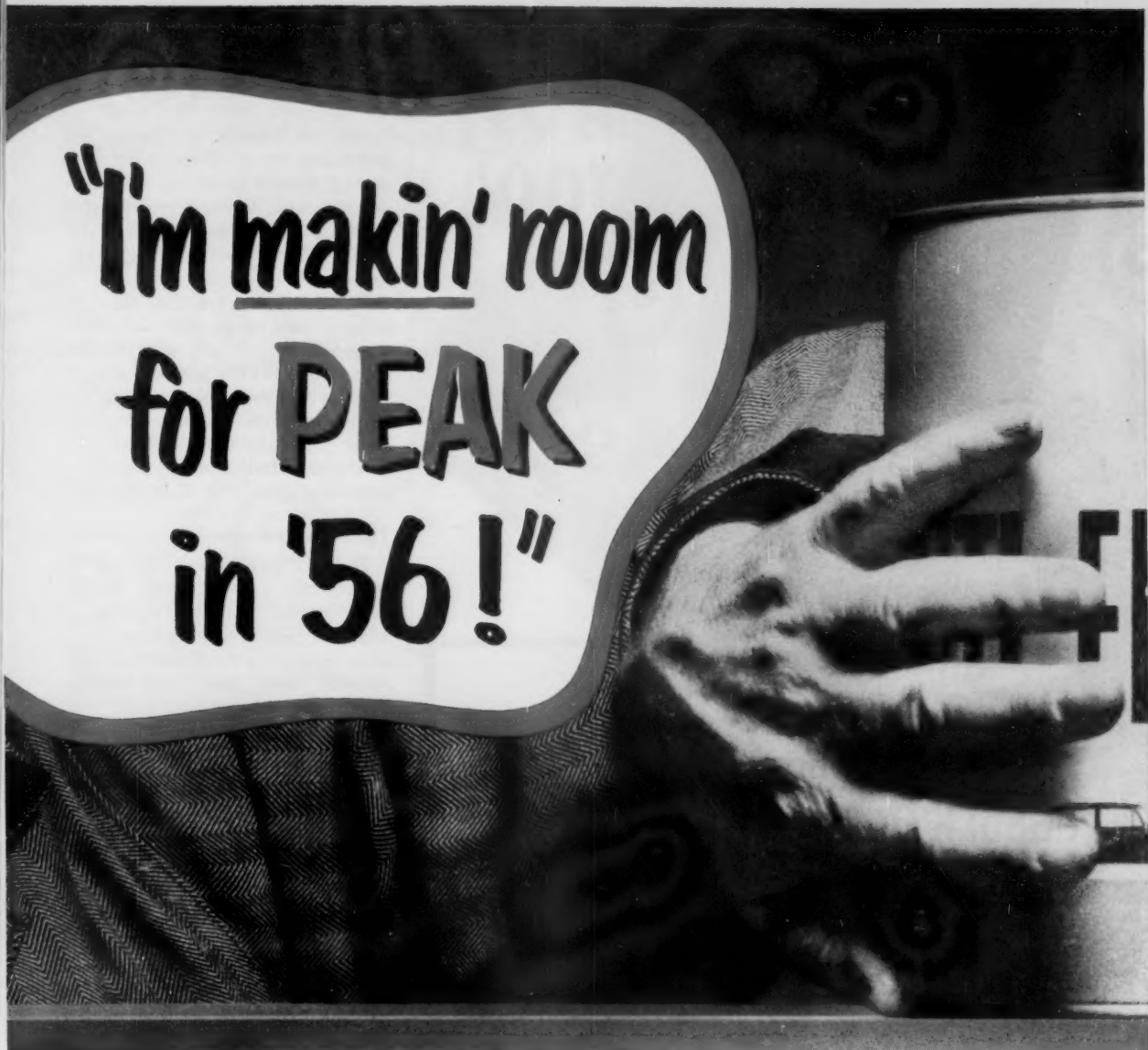
- It's the modern anti-freeze for the modern car
- New exclusive rust-inhibitor combination (Pat. Pending)
- Greater protection from rust than any other national brand
- It's "clean" — looks better in the can — works better in the car

HOMETOWN ADVERTISING supports you:

- Consistent advertising on TV, in newspapers, and other local media
- Hard-selling point-of-sale displays
- Sales-building direct mail pieces for your customers
- Special promotions to car owners

COMMERCIAL SOLVENTS CORPORATION, 260 Madison Avenue, New York 16, N. Y.

"I'm makin' room
for **PEAK**
in '56!"



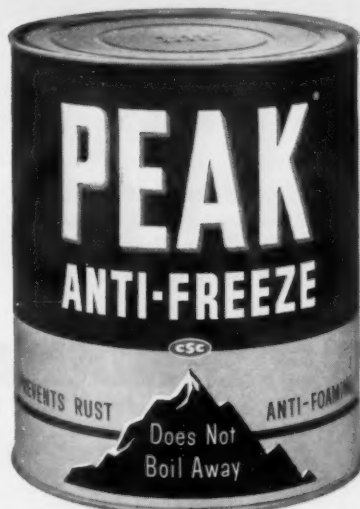
DEALER PROTECTION PLAN helps you make more money with PEAK:

- PEAK is sold only through legitimate service channels
- Retail prices Fair-Traded — No sales to employees
- Every gallon backed by the CSC guarantee
- Efficient distributor organization assures fast delivery and sales service

NOW'S THE TIME TO ORDER so you'll be set to cash in on the big demand ahead. Contact your distributor, or write us direct.

.....
Make room for NOR'WAY, too! — NOR'WAY® Anti-Freeze is PEAK's high-quality, low-cost companion for budget-minded car owners who want maximum freeze protection at minimum cost. You can recommend it with confidence.

PEAK Anti-freeze • NOR'WAY Anti-freeze • NOR'WAY Chemicals





Ask your Ingersoll-Rand Jobber about his TIME PAYMENT PLAN!

Here's the biggest news for mechanics and service shops since the invention of the Impactool. Many Ingersoll-Rand jobbers are now offering a Time Payment Plan that enables you to purchase Ingersoll-Rand Impactools for as little as \$10 down and \$10 a month.

Think of it! You can do *more* work in *less* time and do it *easier* than ever before. Your new Impactool will earn more money for you while you pay for it. In fact, it will pay for itself within 90 days.

Ask your jobber for a free demonstration of Ingersoll-Rand Impactools in your shop now. He'll give you all the details on his Time Payment Plan.

- RUNS NUTS
- REAMS
- DRIVES SCREWS
- SAWS HOLES
- DRILLS
- WIRE BRUSHES
- TAPS
- BORES WOOD
- DRILLS MASONRY
- DRIVES STUDS

Ingersoll-Rand

11 Broadway, New York 4, N. Y.



Originators of Impactools AIR & ELECTRIC

18A-399

Spring Tonic . . .

Continued from Page 45

young car owners. Customers old and young are in the mood for your urging them to spruce-up and tune-up their cars. Winter's wear on cars must be remedied if Spring and Summer care-free motoring is to follow.

The following are the steps of some of these tune-up and spruce-up suggestions. You will want to add your own to the list but keep always in mind the need for stressing replacement parts. Don't be afraid to show your customer the worn part on his car. Often a side by side comparison is enough to make the sale.

Tune-up Procedure

To do a good job on tuning-up present day cars all shops should have proper tune-up equipment which includes a vacuum gage, compression gage, a dwell meter, a volt ammeter tester, spark plug cleaner and tester and the like. With this equipment and trained personnel you are prepared to handle your customer's request for an adequate spring and summer tune-up.

Have a complete program outlined and talk the need over and what it includes. These tune-up jobs usually bring all kinds of work from valve jobs to complete engine overhaul. Don't overlook the generator and starter. In most cases new brushes, new switches and the like can be sold. With an accurate analysis of the ignition system on the modern car, using testing instruments will disclose the various conditions affecting car performance.

The importance of proper maintenance, correctly checking, and adjusting the ignition system when necessary is emphasized by the fact that the ignition system on a 6 volt, eight-cylinder car produces 12,000 sparks on high voltage surges every mile. And for every high voltage surge the ignition system must take 6 volts of the battery or generator and step it up to from 4,000 to 18,000 volts required to fire the spark plugs.

At 90 miles per hour the ignition system is delivering 300 of these high voltage surges every second—that is truly high speed operation. In one three-hundredth of a second the distributor contact points close;

the coil builds up; the points open and the high voltage surge is delivered to the spark plugs.

But even at speed like that the accuracy of the ignition system is such that the timing of each spark to the engine varies not more than one ten-thousandth of a second. With every one of these high voltage surges, the coil, distributor and wiring have to withstand a tremendous stress of 4,000 to 18,000 volts developed.

Start out by using a vacuum gage to check engine performance. It will show up poorly seated valves, worn rings and improper carburetor setting.

Winter is tough on batteries. They should be checked for charge; terminals cleaned, and checked for replacement. The starting circuit should be checked and also the generator. Adjust the voltage regulator with proper instruments and set to the manufacturers recommended setting.

Examine the ignition wires for cracks in the insulation and oil and grease; replace as necessary. Check the fuel pump pressure. This will show the need for new diaphragm or complete overhaul or replacement. Adjust the carburetor for summer driving. Remove the carburetor, clean and set the float level and install new gaskets or an overhaul kit where necessary.

Remove the spark plugs, test and if necessary replace. Check the ignition timing and set with the use of a timing light. Clean and adjust breaker points. Pitted or burned points should be replaced to insure quick starting and sufficient power. Tighten all hose connections, check heat damper making sure it is free and operating properly, remove the air cleaner and service according to manufacturers recommendations. After making these various checks many additional jobs will come to light. To name a few, for example, piston and ring jobs, valve and carbon, generator overhauls, distributors overhauls, starter overhauls, replacement fuel pumps and carburetors.

A wealthy and extremely popular bachelor decided to reform and mend his ways. The first day he cut out cigarettes. The second day, he cut out liquor. The third day he cut out women. And the fourth day he started to cut out paper dolls.

Now... own this ELECTRIC IMPACTTOOL

for as little as

\$10
\$10

DOWN and
a month!



Ask your Ingersoll-Rand Jobber about his TIME PAYMENT PLAN!

- RUNS NUTS
- REAMS
- DRIVES SCREWS
- SAWS HOLES
- DRILLS
- WIRE BRUSHES
- TAPS
- BORES WOOD
- DRILLS MASONRY
- DRIVES STUDS

Here's the biggest news for mechanics and service shops since the invention of the Impactool. Many Ingersoll-Rand jobbers are now offering a Time Payment Plan that enables you to purchase Ingersoll-Rand Impactools for as little as \$10 down and \$10 a month.

Think of it! You can do *more* work in *less* time and do it *easier* than ever before. Your new Impactool will earn more money for you while you pay for it. In fact, it will pay for itself within 90 days.

Ask your jobber for a free demonstration of Ingersoll-Rand Impactools in your shop now. He'll give you all the details on his Time Payment Plan.

Ingersoll-Rand

11 Broadway, New York 4, N. Y.



AIR COMPRESSORS



AIR IMPACTTOOLS



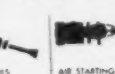
ELECTRIC



IMPACT CUTTERS



FIRE TOOLS



AIR STARTING MOTORS

Originators of Impactools

AIR & ELECTRIC

18-400

New Distributor Continued from Page 51

mechanic points to a square index hole in the advance plate which receives a square pin built into the rotor (arrow A). A similar index pin and hole is found on the opposite side of the rotor and plate, however, the second index pin and hole are round instead of square.

Steps in replacing points are:

Removing the condenser and primary lead from the nylon insulated connection by loosening the retaining screw. Remove the two screws which hold the base of the contact set in place. Remove the point assembly. When installing the points, align the two screw openings in the point set with the two in the breaker plate assembly

and install the screws. Install the condenser and primary leads and secure with retaining screws. Make sure leads are properly positioned to eliminate interference between cap, weight base, and breaker advance plate.

Set distributor shaft so contact arm rubbing block rests in the cam lobe. Insert $\frac{1}{8}$ inch Allen wrench into the head of adjusting screw and turn screw until point gap measures .016 inch.

Adjusting Contact Points with Engine Running

Lift adjustment window provided in the distributor cap. Insert Allen wrench into head of adjusting screw. Turn the screw clockwise until the engine begins to misfire. Then turn the wrench $\frac{1}{2}$ turn exactly (180 deg.) in the opposite direction to obtain the proper gap and dwell. The cam or dwell angle should be 26-33 deg. recommended setting for both Cadillac and Oldsmobile.

Lempco Products Honors Salesmen

Russ Sutton of Easton, Pa. (photo) was recently given recognition by Lempco Products, Inc. (Ohio), as the firm's "salesman-



of-the-year." Al Harding, Sales vice president for Lempco, has also announced the bonus awards for 1955 sales performance for the Automotive Equipment Division.

The three top awards went to Bill Mansfield, North Carolina; Ed Kezele, Detroit; and to Sutton.

...announcing the New
BONNEY UNIVERSAL
Band Adjustment Tool

External Band Adjustment

To service all automatic transmissions wherever external band adjustments are required

ANOTHER **BONNEY TOOLS** FIRST

For complete details contact your Bonney Jobber . . . or write to us. Do it today!

BONNEY FORGE & TOOL WORKS • ALLENTOWN, PENNSYLVANIA

Schrader Blowgun #7184C
Multi-use accessory

Schrader 3650 Type Chuck Gauge
Complete air service anywhere

Schrader Dual Foot Chucks
Move truck business—fast

Extra airlines mean extra profits

The airlines that serve your customers can serve you in many other profitable ways. Schrader equipment is designed to "plug in" at will, in seconds. Quick, handy tools like those shown here can speed and simplify many jobs and services. And it costs little to make air available everywhere you need it with versatile *extra* airlines. The convenience you get pays off in extra profits, because it saves you steps. And customers come back when they know you're equipped to give more prompt, efficient and safer service.

Ask your Schrader supplier for the fittings to set up your extra airlines, and for latest tube or tubeless products and Schrader Gauges, Caps, Cores, Filters—everything you need to service tires with air—accurately, safely—and at a profit.



A. SCHRADER'S SON
Division of Scovill Manufacturing Company, Incorporated
470 Vanderbilt Avenue, BROOKLYN 38, N. Y.

Schrader

REG. U. S. PAT. OFF.

FIRST NAME IN TIRE VALVES

FOR ORIGINAL EQUIPMENT AND REPLACEMENT



A NEW MODEL in the Studebaker Transtar truck line is this one-ton truck with a nine-foot pickup body. New to the one-ton Studebaker models is the 259.2-cubic inch V8 engine of 156-horsepower, previously used only in heavier models. Two stage springs, 12-volt electrical systems, ignition key starters, wide tread rear axle and oil bath air cleaner are now standard equipment. A de luxe cab with new comfort features, including foam rubber seat, sound deadening headlinings, padded arm rest and dual sun visors, will be optional. Wheelbase on one-ton models is 131 inches. Standard transmission is four-speed spur gear, with a four-speed synchromesh transmission optional.



...the difference can be

Herbrand Tools



TOOL-OF-THE-MONTH

TAP AND DIE CHASERS NO. 805

Here's an easy way to restore threads on flared tube fittings. Six tools per set. Fast, accurate. Ask your jobber. Mechanic's net, \$3.25.



This surprised chap *now* knows—there's a *big* difference in tool quality! Herbrand Tools do the job better—and perform with precision for years.

Herbrand's 75 years of experience is reflected in tools of superior design, with precision machined openings permanently fixed by the most modern heat treating methods. See your Herbrand jobber.

OFFICIAL TOOL OF THE "500" MECHANIC

Herbrand Tools

FREMONT, OHIO



Studebaker Sponsors Conservation Parley

The Studebaker division of Studebaker-Packard corporation and the Studebaker dealer organization have joined with the Izaak Walton League as sponsors of the third annual Young Outdoor Americans conference on conservation to be held April 18-20 in Sioux City, Iowa. L. H. Dunten, League president, has announced.

Two delegates will be chosen from each state by cooperating Boy Scouts of America, Future Farmers of America, and 4-H Clubs. Objective is greater conservation consciousness as the conferees return to their homes reporting to their youth organizations and state civic groups on the new information coming out of the conference.

Fix-Up Jobs

Continued from Page 47

come into focus after you have completed the renovating of the car's interior. Sell a clean-and-wax job to your customer. At this time it is also a good idea to take care of minor dents and scratches. Use only top grade materials and take care in choosing the correct shade in spot painting.

Many of today's cars have their chrome protected by a coat of clear lacquer. This old coat should be removed and the chrome carefully gone over. Now respray with a fresh coat of lacquer. This gives the bumper and other chrome parts a "new car" appearance.



A. Louis Oresman, President of Catalina, Inc., asks

"Can you pick the winner?"

"The bathing suit business is like a beauty contest. You never can tell in advance which models are going to win!

"This year, for example, we designed more than 400 different suits. Those that catch on in the stores get a flood of rush orders! They push our production facilities to the utmost. And that, in turn, puts the pressure on shipping and delivery.

"But even though our manufacturing is done in the Los Angeles area, we never have delivery problems anywhere in

the 48 states! They're all solved for us by Air Express! And Air Express has never failed us!

"Using Air Express regularly, we can fill rush orders anywhere in the country in a matter of hours. And in the highly competitive fashion business, that's important!

"And yet, most of our shipments cost less than any other air service. 10 lbs., for instance, Los Angeles to Dallas, is \$5.70. It's the lowest-priced complete air service by 81¢!"



Air Express



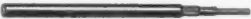


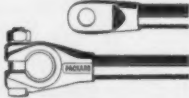
GETS THERE FIRST via U.S. Scheduled Airlines

CALL AIR EXPRESS . . . division of RAILWAY EXPRESS AGENCY

Why do you think they build



*Because Packard Cables
last longer and cost less per mile,
they're used most on new cars,
trucks and buses!*

			
ENGINE COMPARTMENT CABLE —A special Packard development made with new type insulation to withstand heat, fuel-oil vapors, steam and cleaning compounds.	"440" IGNITION CABLE —Long the leader, this Packard-developed high tension cable continues to be used on more vehicles than any other except those using Packard TVRS.	TELEVISION - RADIO - SUPPRESSOR CABLE —This Packard exclusive suppresses radio and TV interference and is original equipment on millions of vehicles.	BATTERY CABLES —Special design delivers full starting power . . . provides extra flexibility and strength. Additional features at no extra cost make replacement easier.

'em with PACKARD CABLES?



Don't replace . . . RENEW! When stocking cable, follow the lead of the vast majority of automobile and truck manufacturers and specify Packard. You'll give your customers like-new service.



MEET THE LEADER . . . PACKARD LOW TENSION CABLE WITH "404" INSULATION!

Here's a tough, highly flexible cable with stranded copper conductor that meets all requirements without use of braid. It's slimmer. It strips more easily. And, it gives greater customer satisfaction. The "404" insulation is oil-proof, flame-proof, moisture-proof and acid-proof. Millions of feet are installed daily on new cars, trucks, buses and tractors.

Packard Cables are engineered to give superior performance in every class of automotive service. Vibration, temperature, acid, constant flexing—Packard Cables conquer all these. And they're made for easier installation, too! More than half the cars that pass your door are equipped with Packard Cable.

Now's the time to call your Packard Jobber for fast, single-source delivery service. You'll be pleased to find that all items are packaged for your convenience!

**FOREMOST BUILDER OF
AUTOMOTIVE WIRING**

Packard
REG. U.S. PAT. OFF.
TRADE MARK

Packard Electric Division, General Motors, Warren, Ohio



A GENERAL MOTORS PRODUCT — A UNITED MOTORS LINE
DISTRIBUTED BY WHOLESALERS EVERYWHERE

Management Clinic . . . Continued from Page 56

you was arguing to buy. But the other side, the side the salesman hears, was offering all the standard reasons why you shouldn't buy.

This is the only realistic outlook possible on objections and resistances. And the salesman who has this outlook, or who adopts it, is ready to close shop.

Objections are indications that the prospect is already **PARTIALLY** sold. As such, they should be welcomed rather than dreaded. The salesman who looks upon objections as a signal to join battle with the prospect is asking to have his order turned down.

On the other hand, the sales-

man who looks upon objections as an invitation to **HELP** the prospect resolve his own mental struggle and decide in favor of buying is on the road to an order.

In general, objections fall into two categories: before and after.

The "befores" are initial defense mechanisms, raised before the prospect is in a position to pass judgment on your product or service. They are the "don't need it" and "can't afford it" type of thing that come before you have laid the idea out in its entirety. The secret to handling these objections is to **SIDESTEP** them and keep on going. Saying "I see" and continuing to sell is often all that is necessary on your part.

Or you might say, "I see what you mean, but if it's O.K. with you, Mr. Prospect, I'm going to

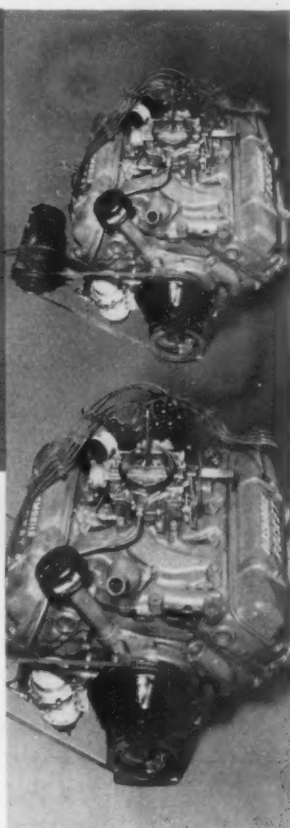


Today's engines have so much higher horsepower, bearing loads, and speeds, that old-fashioned pin fitting and rod reconditioning methods have become as obsolete as the Model T.

And it's for these reasons that guesswork has no place in modern engine overhaul. Many factory manuals now specify the exact clearances or interferences for pin fits *in tenths of thousandths*. Rod journals, too, must be reconditioned to *original manufacturer's specifications* to stand up under the greatly increased bearing loads.

Sunnen Precision Pin Fitting and Rod Reconditioning equipment is the answer to modern rebuilding requirements. It will uphold your reputation as a top-notch automotive machine shop, insure you against costly comebacks, build up your shop volume and increase your parts business.

Let us demonstrate this equipment—show you how it will pay for itself out of profits in a short time. There's no obligation—just drop us a postcard.



cover that in just a moment." The important thing is to sidestep, not meet these **EARLY** objections head-on.

The "afters," offered after the prospect is in a position to express judgment, deserve attention—not **ATTACK**. The mere fact that you know an answer that will blast that objection into a cocked hat doesn't give you license to shoot—not if you want the order, anyway. You can blast rabbits with elephant guns, but there usu-

(Continued on page 116)

922

SUNNEN PRODUCTS COMPANY
 7918 Manchester Ave., St. Louis 17, Mo.
 Canadian Factory: Chatham, Ontario

For Your Protection Insist On Sunnen Measured Pin Fits

WATER PROOF
RUST PROOF

METAL GLAZING
METAL
FILLING

COLD MAGIC

LOW IN COST
EASY
TO USE

ONE POUND
DOES WORK
OF
6 LBS. LEAD

JUST APPLY
LET DRY

READY TO USE
NO
MIXING

All-Purpose Cold Solder



Order KwikMetal from your Local Jobber or write for nearest Distributor.
Free Literature Available • Jobber Inquiries Invited

ATOMIZED MATERIALS COMPANY, INC.,
207A Rauch Bldg., Pittsburgh 5, Pa.

ally isn't enough of the rabbit left to eat.

Take It Easy

Instead of throwing lead the minute an objection pops up, TAKE IT EASY! Don't tense up. Put the three "L's" to work for you—lean back, listen and let him talk. Hear him out with a pleasant

and interested expression.

Remember, part of him is arguing with himself to buy. If you hear him out, he will be partly selling himself, too. Question him, if need be, to draw his full objection out into the open.

Then make sure that it IS his one and only objection. Say: "Then, as I understand it, Mr.

Prospect, the only point that really stands in the way of buying this product (or service) is . . ." and restate it in your own terms.

Then you are ready to go to work on it. Then you are ready to turn his objection into a reason for buying or to show him that others felt the same way but were pleasantly surprised with the actual results of your product or service, once they bought it. Then close again!

That's SELLING!

Handling objections is NOT a debating contest in which you snipe away in a constant effort to prove your opposition wrong. You don't want to prove him wrong. Prospects who are proved wrong don't buy.

Besides, half of him ISN'T wrong. The half of him that wants to buy is on your side. Make an ally of that half, and you've got a sale.

Once a salesman thoroughly understands and agrees with this approach to objections, he SINCERELY welcomes the "afters" as signals of buying interest. And he no longer dreads the "befores."

Objections are natural to selling. They are as normal as breathing. They are as much to be expected as tomorrow's sunrise. Without them there would be no need for us as salesmen. And without them there would be few sales closed.

Kent-Moore Acquires Cristil Co. Assets

Kent-Moore Organization, Inc., manufacturer of automotive service tools, has announced the purchase of the 20,000 sq ft building and other physical assets of the J. H. Cristil Company of Edgerton, Ohio, manufacturers of aluminum giftware.

According to J. D. Adair, Kent-Moore President, a separate corporation, now known as the Rob-inair Mfg. Corporation, has been formed to purchase and operate the facilities. All stock of the new company will be held by Kent-Moore.



NEW! **AMMCO**
MODEL 4200 ZIP-O
BRAKE BLEEDER
BLEED BRAKES—THE EASY WAY

- ONE MAN OPERATION — Fast — Handy — Modern — Clean
- Use indoors — Use outdoors. Connection to tire provides constant correct pressure.
- Air can't get into fluid due to special diaphragm design. Never any fluid loss.
- Make brake bleeding a profitable operation with an Ammco Zip-O.

only \$2450



NEW! **AMMCO**
MODEL 4150 Safety
BRAKE GRAPH
SELL BRAKE SERVICE — THE EASY WAY

- Record braking efficiency under operating conditions.
- Build customer confidence — Records stopping distance — Tells which wheel grabs or pulls.
- Speed service work — Simple and fast in operation — Sets on floor of car.

only \$2450

● BUILD YOUR BRAKE SERVICE PROFITS — IT'S EASY
GET THEM FROM YOUR AMMCO JOBBER

AMMCO TOOLS, INC., 2102 Commonwealth Ave., North Chicago, Ill.



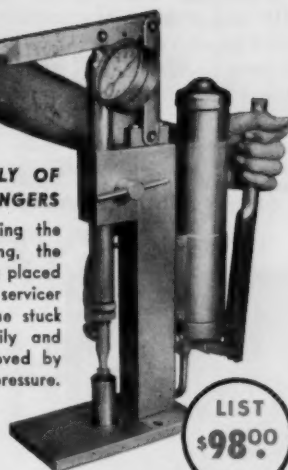
Takes the HEADACHES OUT OF SERVICING HYDRAULIC VALVE LIFTERS

HOLMES SERVICER FOR HYDRAULIC VALVE LIFTERS

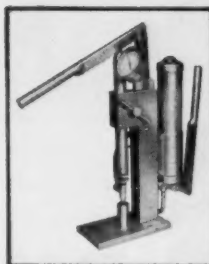
THERE'S nothing like the new Holmes Servicer for taking the headaches out of servicing Hydraulic Valve Lifters. Use of this machine greatly simplifies the job by permitting quick disassembling of all lifters . . . even those stuck inside the tappet body. The ease with which each can be taken apart, cleaned, and re-assembled makes possible the re-use of many lifters that would normally be discarded. In ten to fifteen minutes a full set of lifters can be tested, giving each an accurate leak-down test, thereby, assuring the installation of *only* lifters in perfect working condition. The new Holmes Servicer is a precision machine for fast, dependable servicing of valve lifters. It enables a shop to do more efficient work, prevents the scrapping of useful lifters, thus providing a savings to the customer in not having to purchase unnecessary replacements. Here's truly a tool that prolongs the use of lifters, saves the customer money, and soon pays for its-self with increased shop profits, and customer satisfaction. Order from your jobber today.

DISASSEMBLY OF STUCK PLUNGERS

After removing the retaining ring, the lifter can be placed under the servicer stem and the stuck plunger easily and quickly removed by hydraulic pressure.

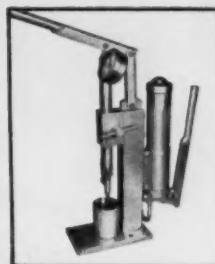


LIST
\$98.00



ASSEMBLY

After cleaning and reassembling lifter parts, the servicer stem can be conveniently used to depress the plunger until the retainer ring is replaced.



TESTING

As a final service, an accurate leak-down test can be had of the hydraulic valve lifter under conditions which simulate actual operation.



LIST
\$9.00

HOLMES LIFTER REMOVING TOOL

Introduction of this tool solves one of today's most aggravating and time consuming operations . . . the removal of Hydraulic Valve Lifters that are stuck inside the cylinder block. With this tool, a mechanic can remove such lifters from the top side of the engine, without having to take-off the oil pan or drive the lifter out. The new tool has a tee handle on one end and internal expanding chuck on the other which can be snapped into the lifter body and locked in place. Lifters so attached are removed quickly and easily, without distortion or damage. Here's an inexpensive tool that saves time and trouble and is today much needed by every mechanic.

Order from your jobber . . .



Or Write Factory Direct

ERNEST HOLMES COMPANY

2505 EAST 43RD. STREET

CHATTANOOGA, TENNESSEE

Safety Lane Continued from Page 43

or look, or think, but ACT! Activity makes an impression. The publicity and slogans, the committee meetings, and the special events are all part of the process of participation.

Dramatic Results

For motorists, Vehicle Safety-Check turns up dramatic examples

of the importance of maintaining a vehicle in safe operating condition. Last May the editor of a Casper, Wyoming, newspaper wrote a stirring editorial urging readers to have vehicles safety-checked after he discovered a badly damaged muffler was pouring carbon monoxide into his car and loose steering endangering his life at every

turn. One driver in Tacoma, Washington, breathed a sigh of relief when his brake fluid gushed during the Safety-Check just before he was to descend a steep hill. The majority of motorists appreciate a Vehicle Safety-Check whether it shows their cars in need of repair or just gives them the peace of mind that comes with knowing their cars are in safe operating condition.

For the community, Vehicle Safety-Check is a first step toward concerted year-round programs of traffic accident prevention. Four cities established permanent traffic safety organizations as a direct result of the 1955 Safety-Check program.

Materials for use in community Vehicle Safety-Check programs and additional information on the May program can be obtained by contacting: National Vehicle Safety-Check for Communities, 316 Ring Building, 1200 Eighteenth St., N.W., Washington 6, D. C.

McGaughey Elected Communications VP

Election of William H. McGaughey to the new post of vice-president of American Motors



Corporation in charge of communications has been announced by George Romney, president.

Mr. McGaughey, whose professional career covers more than 20 years in the communications field, joined American Motors' predecessor company, Nash-Kelvinator, in 1952 as assistant to Mr. Romney, then vice-president. He was named director of communications and management development in 1954.

When an arc welding electrode

Has easy, dependable operation for welding in all positions

Yet has minimum tendency to burn through

WHY
use anything but
FLEETWELD 37
for body repairs



replaces body panels fast . . . at low cost
FLEETWELD 37
best electrode for body work

gives you

- less distortion
- stronger welds because arc is smooth, soft . . . has good slag control
- less burn through on poor fits
- operates at low currents without sticking
- easy-to-hold arc in flat and vertical positions makes body welding simple

Try Fleetweld 37. Send for specifications and procedures in Bulletin 1351. Write

THE LINCOLN ELECTRIC COMPANY
Cleveland 17, Ohio

LINCOLN . . . one dependable source for all your welding needs

THE LINCOLN ELECTRIC COMPANY
Dept. 4010
Cleveland 17, Ohio

- ☐ Send me Bulletin 1351
☐ Have representative call

Company _____
Address _____
City _____ State _____
Name _____
Position _____

Only ARMSTRONG Can Promise and Deliver
EXTRA MILEAGE-EXTRA RECAPS
AT NO EXTRA COST!

*The Secret lies in ARMSTRONG'S
2 EXCLUSIVE EXTRA INSERT PLIES!*



**Truckers Certified Records
Prove: ARMSTRONGS Keep
Operating Costs Lower!**

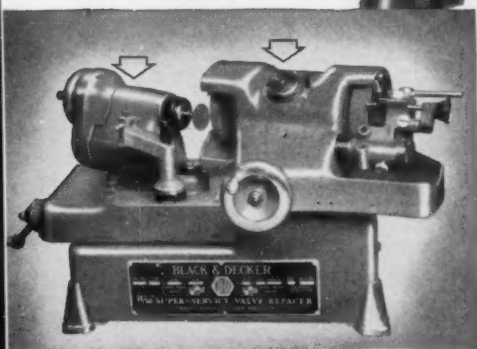
Armstrongs give you so many more miles . . . so many more recaps for your money because Armstrongs are made *stronger*! Two exclusive extra insert plies plus the breaker strip help hold the carcass tight . . . reduce tire growth and mileage-consuming "stretch." And by guarding against heat and impact breaks, they make Armstrongs up to 71% more recappable! Yes, Armstrongs wear longer — yet cost no more! Good reason to switch to Armstrong!

Remember: You Get Double Insert Plies Only In

ARMSTRONG  **TRUCK TIRES**

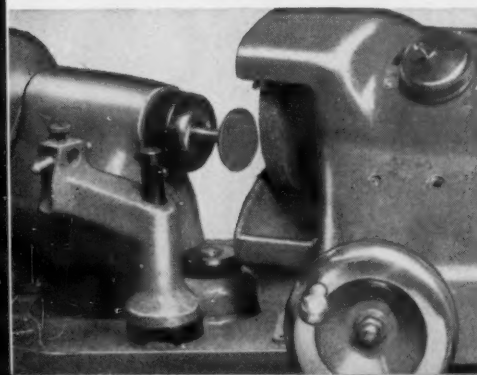
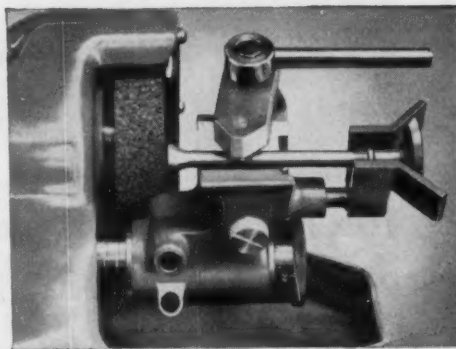
The Armstrong Rubber Co., Home Office, West Haven, Conn.

NEW, IMPROVED *Black &* is **POWER-BUILT**



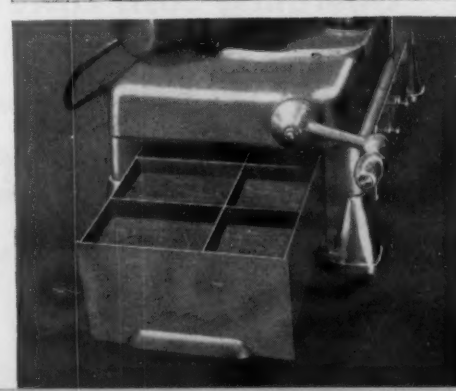
▷ **POWER-BUILT!** Two B&D-built universal motors drive collet and wheel spindles for abundant smooth power—Belt driven Work Head Spindle with reduction gearing at motor eliminates any chance of "chatter."

▷ **ONE COMPLETE UNIT!** No "extras" to buy. Combined Micrometer Valve Stem and Rocker Arm Grinding Attachment with exclusive Quick-Clamp for fast locking of stems, tappets is standard equipment.



▷ **TRAVERSE GRIND** at any angle! 0° to 90° valve angle adjustment... capacity to handle up to 4" valve heads; $\frac{3}{32}$ " to $\frac{11}{16}$ " valve stems... consistently good grinding performance!

▷ **NEW COOLANT SYSTEM!** New coolant circulating method—all tubes and lines completely concealed! 1-gallon coolant reservoir with baffle plates. Single valve control wet grinding at both valve and attachment wheels.



Decker® VALVE REFACER

for faster valve job profits!

- ★ Loaded with time-saving, cost-cutting features!
- ★ No special skills needed to operate it!
- ★ Buy it for as little as \$13.79 per month!

This B&D Deluxe Super-Service Valve Refacer—redesigned with many *completely new* and exclusive features—will revolutionize your valve job business!

Yours will be the best equipped shop—turning out the best work—and *you* will pocket extra profits, *in less time*. You'll move valve jobs out faster and cut labor costs to the bone. You'll eliminate costly "come-backs" and give your customers much finer, more accurate workmanship... and build your valve job profits through customer satisfaction and word-of-mouth boosting! Check these features against all others—then think of this: You get easy, long terms from your B&D distributor—No big initial investment needed! See him today, or write: THE BLACK & DECKER MFG. Co., Dept. 3104, Towson 4, Md.

PLUS Constant spindle speed; fast, efficient valve chucking including adjustable end stop; all bearings readily accessible for precision adjustments; *many other terrific features!*

Also Available . . .

Sensational new air chuck as optional equipment for super speed valve refacing by shops doing high production work.

Your distributor has special credit arrangements all ready for you—no red tape, no delay. This refacer can be yours for as little as

\$13⁷⁹
per month!

Your profits start at once! Make yours the best equipped shop in town, with the new, improved B&D Deluxe Super-Service VALVE REFACER. See your distributor for full details today!

LOOK IN THE YELLOW PAGES UNDER "TOOLS-ELECTRIC"



Black & Decker®
PORTABLE ELECTRIC TOOLS

Merchandising Continued from Page 55

customer as you help him keep his car running by spotting trouble in advance."

Sell the Need

Joe lays great stress on this point of selling the need. Because he uses top brand products and follow-through service, customers rely on him and his men. When

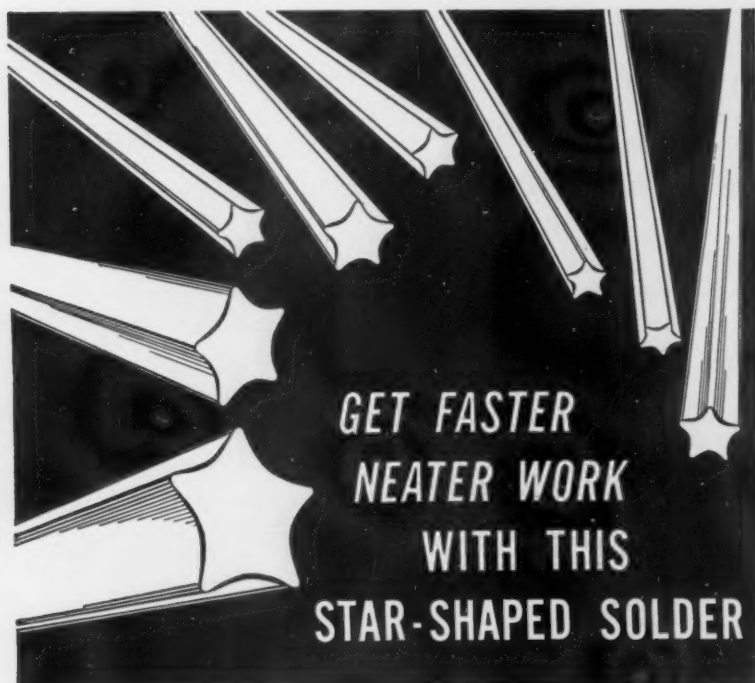
they recommend a new oil filter, a tune-up, a battery, a replacement tire, and the like, a customer is told "why" in easy, friendly, no high-pressure language.

With Joe at Caves' Service Center is a working crew of eight men. The station is open from 7 in the morning until 11 at night. This 16 hour stretch is divided into two

shifts—three men and one relief man assigned to each shift. Joe himself comes to work around 7:30 a.m. and knocks off about 6 p.m. He eats lunch at the station and allows himself one full day and one half-day off during the week.

Joe is proud, very proud of his staff of men. Among them are several former owners and managers of service stations. He insists on hiring only top-notch men and as advice on this matters says, "once hired, keep them by paying them well."

As owner of his own business, Joe can look back on days when he was working hard to achieve this goal. After graduating from (Pa.) State Teachers College in 1939, he went to work as a retail instructor for a large oil company. After managing one of this firm's service station, he moved over as owner on-a-lease basis to another service sta-



Jobs move faster, neater, easier and more economically with STAR Body Solder. Here are four reasons why:

- ★ The star shape exposes the solder to the torch in thin points so melting is easier and quicker.
- ★ The star shape makes it easy to control the flow of molten solder. It does not run off the work; waste is cut.
- ★ The star-shaped bar is easier to grip and handle.
- ★ Star Body Solder stays plastic long enough to be paddled to a mirror-like surface that can be ground to a feather edge.

Try STAR Body Solder. You'll find it pays dividends in faster, better work. Available from your local jobber.

Federated Metals

DIVISION OF AMERICAN SMELTING AND REFINING COMPANY
120 BROADWAY, NEW YORK 5, N. Y.

IN CANADA: FEDERATED METALS CANADA, LTD., TORONTO AND MONTREAL

Aluminum, Anodes, Bobblits, Brass, Bronze, Die Casting Metals, Lead and Lead Products, Magnesium, Solders, Type Metals, Zinc Dust



tion for a different oil company. He made an immediate success of this operation—it was located in a large Eastern Seaboard city—and after four years, decided to make the big move: Return to his home town and open up his own One Stop Service operation.

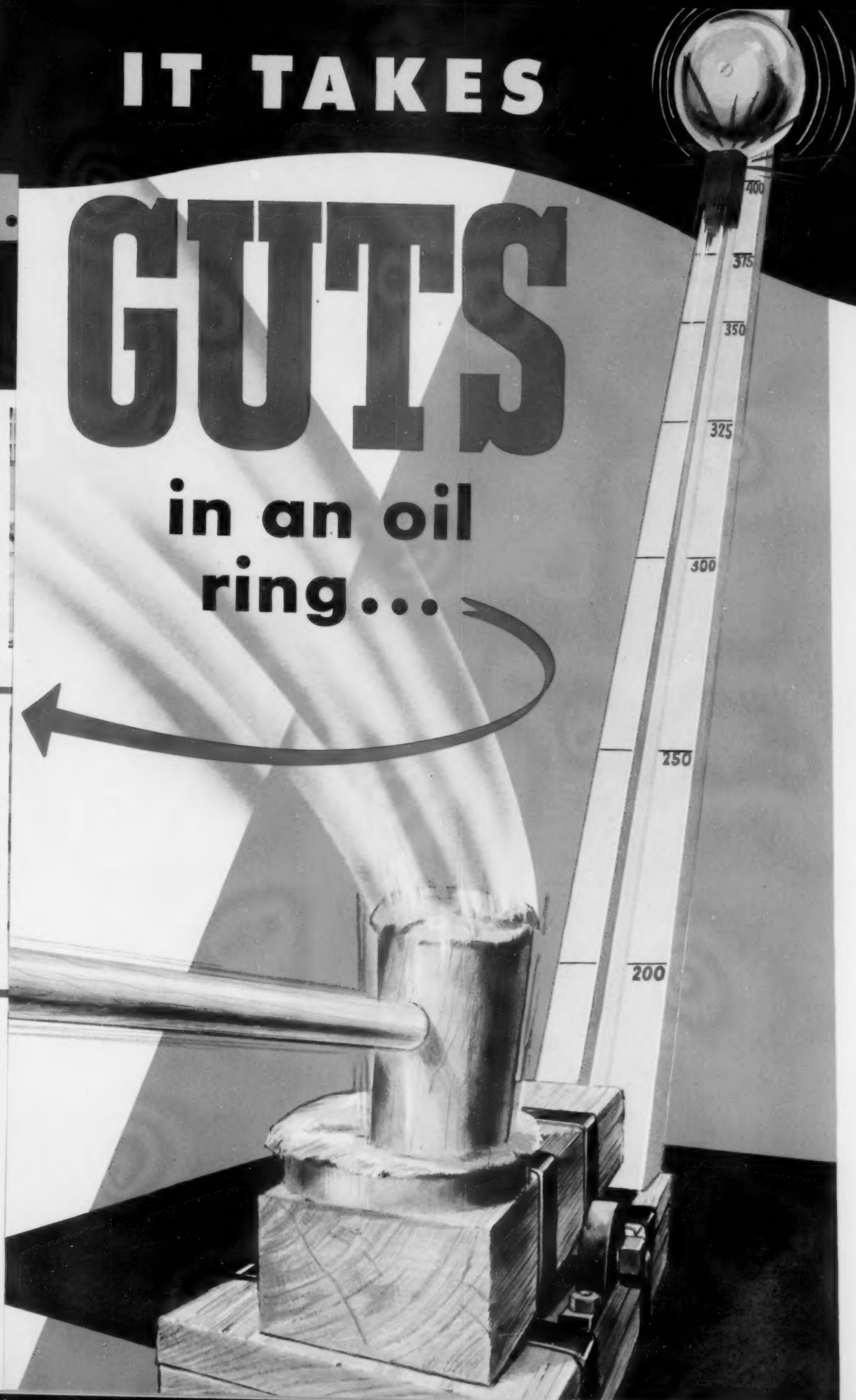
Thus in September of 1951, he set up shop in Havertown. Because of his friendly disposition and because he was a former basketball and football star in school days, he had good assets behind him to draw on home town customers. His location, however, at the time seemed a bit out in 'left field.' It was on the fringe of the community and there

(Continued on page 128)

IT TAKES

GUTS

**in an oil
ring...**



TO CRACK THE OIL MILEAGE

...at open throttle high speeds and at

AND GUTS IS WHAT THE



**POSITIVE LOW SPEED
"HIGH VACUUM" OIL CONTROL**

Positive Low Speed "High Vacuum" Oil Control. Low speed oil creep around the side of the ring is prevented by using an accurately machined separator which supports the cylinder contacting rails throughout their depth and circumference and prevents rocking. This provides uniformly close clearance between the groove wall and the rail without reducing the free action of the ring in the groove.



**POSITIVE OIL CONTROL
AT HIGH SPEEDS**

Positive Oil Control at High Speeds. High speed "flutter" or "surfboarding" is controlled by special flexible reverse loop expander which provides a more uniform high unit pressure on the two cylinder contacting rails. The rails are chrome armored but are prelapped and heat shaped for rapid break in.

No Gouging or Scuffing of Cylinder Wall. The spacer will not gouge or scuff the cylinder wall because it is made of electric furnace iron. It is another oil ring in itself with built-in tension and two additional scraping edges. With the two chrome armored rails and the two oil scraping edges on the spacer, the 400 oil ring is really two rings in one.



**"LIGHT HOUSE" INSPECTION
OF FINISHED RAILS**

Heat Shaped Cylinder Contacting Rails. Cam shaping by heat treatment produces the same "light tight" fit in cylinders that exists in piston rings that are individually cast to a cam shape. This cam shaping, exclusive with McQuay-Norris, is very important where the bearing edges are chrome armored. When these chrome surfaces are prelapped, it produces positive contact with the cylinder throughout its circumference and assures efficient trouble free ring and cylinder life.

**LARGEST PRODUCER OF SMALL
RINGS IN THE AUTOMOTIVE INDUSTRY**



GUARANTEE

McQUAY

BETTER

GE BARRIER

high vacuum low throttle speeds

"400" OIL RING HAS



**WARRANTED . . . to out-perform any other ring set
in the hard to hold jobs regardless
of kind, design or price!**

Y-NORRIS MANUFACTURING CO.

ST. LOUIS • TORONTO

EVER KNOWN FOR BETTER PISTON RINGS SINCE 1910

COMPARISON PROVES IN A PISTON RING, TOO

	Made of Electalloy Finest Electric Furnace Process	Altinized Quick- Seating Top Fire Ring — Resists Corrosion and Wear	Cam Shaped Chrome Armored Steel Rails — Made to Fit Cylinders Perfectly	Reverse Loop Expander — Uniform Pressure on Entire Circumference of Ring	Top Chrome Rings Available
LEAK-PROOF	YES	YES	YES	YES	YES
RING "A"	NO	NO	NO	NO	YES
RING "B"	NO	NO	NO	YES	YES
RING "C"	NO	NO	NO	NO	YES
RING "D"	NO	NO	NO	NO	YES



*Balanced for positive control
For less blow-by
For quicker seating
For quicker profits*



LEAK-PROOF
PISTON RINGS

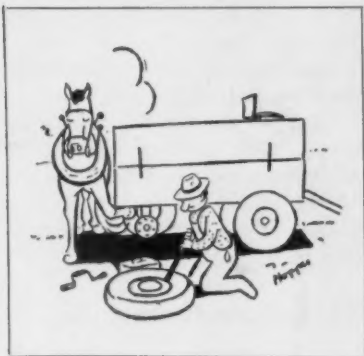
mean customer satisfaction

American Motors Announces New V-8

American Motors reports that its new \$11,000,000 V-8 engine will be installed only in new models which are being added to the present lines of Hudson and Nash cars for introduction late this Spring.

Rated at 190 horsepower, all basic factors of the new engine, such as crankshaft, valve size, block, etc., were designed for above 300 hp capacity. The latter represents the potential of the engine, with about 110 hp withheld in "design reserve."

The new AMC V-8 has been under development for more than four years, and will be built on a new engine line at American Motors' plant in Kenosha, Wis.



Meade F. Moore, vice-president of engineering and research, who helped develop the company's first valve-in-head engine in 1916, said that "among the major factors considered, most important in our new engine approach were 1) Much higher fuel economy than is usually found in high-powered engines, 2) better torque value over a maximum range of speeds, 3) excellent performance characteristics, 4) compactness consistent with modern automobile design, 5) ease of accessibility for service, and 6) future potential of the design.

"We have traditionally stressed the economy, performance relationship rather than high speed possibilities, and we will continue to do so."

The new engine is basically simple in design for ease of assembly and economy of manufacture. The basic form, according to American Motors engineers, has

design provisions for ease of servicing. Engine compartment accessibility is well planned for minor adjustments and repairs.

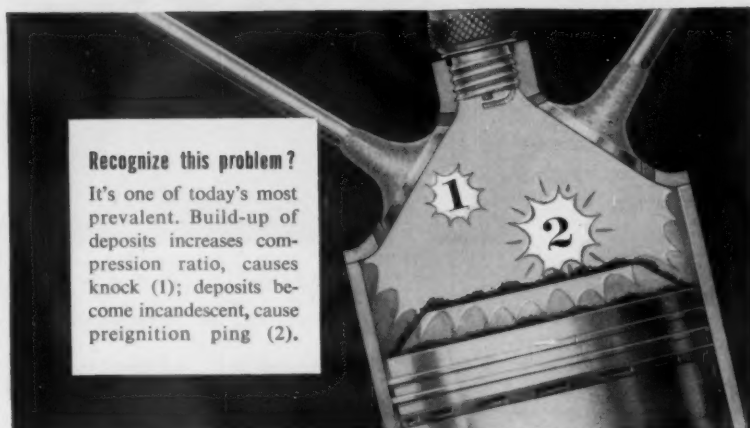
The new AMC V-8 engine was designed for the 12-volt electrical system used on all Nash and Hudson cars. Three transmissions are offered: Silent synchromesh as standard equipment; automatic overdrive, optional; and the new, optional "Flashaway" Hydra-Matic.

The new "Flashaway" automatic transmission incorporates many

new improvements for smooth and silent shifting in all ranges. The Dual-Range feature of this transmission has been retained. A new "Park" position has been added for safety in parking and on hills.

The "Selecto-Lift" starting system which American Motors developed has been retained with the automatic transmission. The car can be started in either the "Neutral" or "Park" position by lifting the transmission selector lever.

PREVENTS COMBUSTION CHAMBER DEPOSITS!



Pennzoil With Z-7 Controls Carbon, Stops Power-Stealing Knock and Ping!

• Your customers will see the difference in smooth power and pickup when you switch them to Pennzoil with Z-7. This different Pennsylvania oil has an *all-oil* lubricating body that resists even the most intense engine heat and pressures, controls power-stealing deposits, keeps horsepower unlocked for keeps. It's a sure way to customer satisfaction—more profitable service business.

Available in all correct service grades.

Cash in NOW! Call your nearest Pennzoil Distributor, listed in the yellow pages of your phone book; or write Pennzoil, Box 78, Oil City, Pa.

MEMBER PENN. GRADE OIL ASSN., PERMIT NO. 2



ONE OF 16 new model mobile clinics being sent into the field by Chevrolet to demonstrate at dealerships latest methods, materials and equipment for used car and truck reconditioning. Feature of the equipment is the new plastic repair kit by which auto sheet metal may be repaired. Holding the kit is Louis E. Taylor, one of the regional reconditioning instructors who have charge of the clinics. Items in the spread of reconditioning materials include steam cleaner, spray painting kit, portable electric polisher, interior refurbishing equipment, engine painting and cleaning outfits.



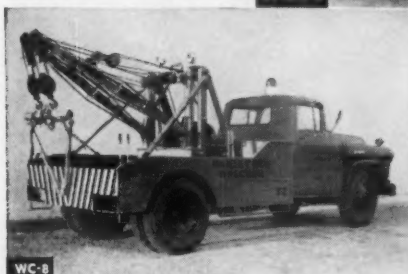
Manley Wrecking Cranes

Most complete line
of wreckers—9 models
3 to 10-ton boom capacity
all NEWLY DESIGNED
for 1956

Send coupon
for demonstration
or information



WC-10



WC-8



WC-6

This 10-ton wrecker and the 8 and 6-ton wreckers (shown at left) all have twin booms that swing to either side and outriggers (shown in wc-6 photo).



WC-4



WC-5

Ask for Demonstration

MANLEY DIVISION
American Chain & Cable, York, Pa. MA

Please arrange demonstration ☐
Send literature and prices ☐

Name _____

Address _____

Town _____ Zone _____ State _____

Visit MANLEY Exhibit
Middle Atlantic Automotive Show
Philadelphia, Pa. • April 11-14



Manley Division
AMERICAN CHAIN & CABLE

York, Pa., Chicago, New York, Portland, Ore.,
San Francisco, Bridgeport, Conn.

In Canada:

Dominion Chain Company, Ltd., Niagara Falls, Ontario

F. R. Householder Joins Plymouth Div.

F. R. (Ronney) Householder, nationally known auto racing driver and official, has joined Plymouth as a staff engineer. Householder's assignment will include development work on the 240-horsepower Plymouth Fury.

Householder was an observer for Plymouth at Daytona Beach in February when the Fury, with optional high performance equipment, averaged 136.415 mph in the "flying mile." He is a five times winner of the national championship in midget auto racing.

Merchandising . . .

Continued from Page 122

were empty fields on three sides of him.

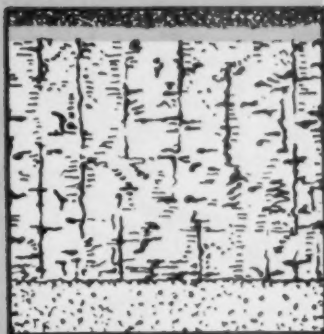
Today—almost five years later—these same fields contain neatly spaced homes of his expanded home town community and his service center is bounded by several small industries and a lumber yard. Needless to say, employees of these firms serve as an excellent potential to add to his already well-established list of neighborhood patrons.

In community and civic life Joe takes an active interest. There is little doubt that this aids his contacts with the public at large although this was not his prime reason for participating. As a father of two—a boy and a girl—he is concerned with his children's recreational and educational environment. He is a director in the local Boy Scout chapter, a tried and true member of the PTA, and an oft-called-on member in both groups to serve as committee chairman in special projects.



It takes a little nickel

...to save a lot of dollars



NICKEL ELECTROPLATE BARRIER

You wouldn't think a tiny strip of nickel, only .00006 of an inch thick, together with the electroplated .001" Micro layer of babbitt, would give you a 3½-to-1 mileage advantage over conventional babbitt bearings in the engines you service... but it's true!



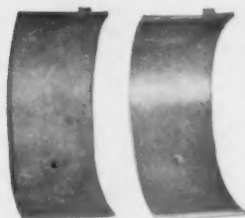
THOMPSON ENGINE BEARINGS for replacement use include: Conventional babbitt; Micro babbitt; copper-lead; and our famous "CL-77" heavy-duty bearing with the Micro overlay.

It's this thin nickel barrier (an exclusive patented feature) that prevents diffusion of the babbitt overplating into the copper-lead base metal in the Thompson "CL-77" heavy-duty bearing, that's piling up amazing mileage records.

That means *service* dollars saved by the owner of the engine... and *profit* dollars made by the man who installs Thompson "CL-77" Heavy-Duty Bearings.

In the world of engines... car, truck, bus and tractor... Thompson is the leader, not only in the Original Equipment field, but also in "Original Equipment" replacement parts.

Your Thompson Jobber's catalogs contain hundreds of "CL-77" bearing listings. Get "CL-77" Bearings from your Jobber for the heavy-duty engines you service.



Thompson "CL-77" heavy-duty bearing.

Ordinary bearing.

See your  **Thompson Products Jobber**

THOMPSON SERVICE SALES
2209 Ashland Road, Cleveland 3, Ohio

Clearing House Continued from Page 49

air cleaner, as sometimes the air cleaner becomes clogged.

Wants Answer to Ford Stalling in Reverse Gear

I have a 1951 Ford V-8, equipped with Fordomatic, that stalls in reverse and at idle speed. We have

installed a new dash pot but this does not seem to help. We have also tried all other adjustments. Could you give us any suggestions?

Leo M. Kraus
Kraus Servicenter
Matawan, New Jersey

USUALLY, when you run into this trouble it is due to the

dash pot adjustment or a high float level. I would suggest checking the dash pot adjustment and resetting the float level. The engine idle speed should be set at 445 to 455 rpms with the shift lever in neutral, and transmission and engine at normal operating temperature.

Wants to Improve Ride; Reduce Gas' Consumption

I have a 1953 Buick Roadmaster (25,000 miles) about which I have several questions. Could I improve the ride of this car by installing new type airplane shocks? In addition, would increasing the tire size from 8.00 X 15 to 8.20 X 15 make any appreciable difference in the ride? The car has a gear ratio of 3.6. Would this be changed much? Another problem I have is mileage.

The car gets 11 to 12 miles per gallon and is equipped with a Stromberg four-barreled carburetor with .051 jets. Could this be responsible for abnormal gas consumption? What are the minimum size jets that could be used? Would adjusting the floats help? I also wonder if a reduction in gear ratio would help. One last question. What are the possibilities of replacing the present twin turbine Dynaflo with the newly improved version?

Francis Agmenio
Bordentown, New Jersey

REGARDING your rideability, airplane shocks certainly would make the Buick ride a lot better. This can be done on the rear by obtaining some brackets that are used on the 1956 models and then you can convert to any type airplane shock. They all work very well. Changing your tires from 800 to 820 would definitely give you a better ride and would also provide improved traction and stopping. However, it would change the gear ratio only slightly and I do not think you will have anything to worry about at that point.

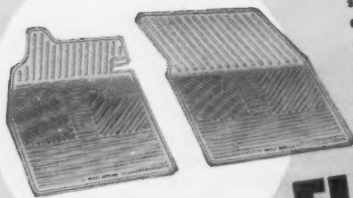
The 11 or 12 miles per gallon you mentioned is not too bad for an engine of this size. Naturally, the richer the jets you install the more gas you will burn. I would suggest trying the 49 or even the 48 jet,

(Continued on page 134)

Tops Everything in Auto Floor Mats

FLOORKINGS

7 COLORS TO HARMONIZE

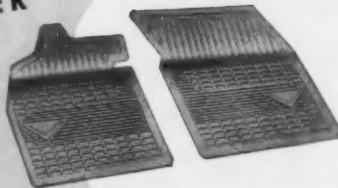


Sales come fast, profits come high, when you sell FLOORKINGS — the new sensation in the automotive field. Fits perfectly on both sides of the hump. Easy to remove for cleaning. In 7 rich, harmonizing colors: Emerald Green, Sky Blue, Coral, Alpine White, Ebony Black, Desert Tan and Blue Gray.

FLOORMATES

THE STEP-UP NUMBER

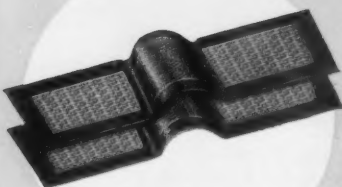
A handsome step-up number — the very finest in rubber floor mats. Made of heavy gauge rubber in a very interesting pattern where dirt is captured — where it "stays put". In 7 matching colors — packed in beautiful, descriptive carton.



MINUTEMATS

REAR COMPANION MAT
IN MATCHING COLORS

This is the popular one piece half mat that covers width of entire car. Protects original expensive carpeting against grease, wear, dirt and slush. To clean, simply lift out, shake and replace. Fits front and rear compartments.



INDIVIDUALLY
BOXED

Doan
MANUFACTURING CO.
CLEVELAND 12, OHIO



THESE *New*
HYDRA-MATIC
TOOLS
OPEN UP
profitable NEW
REPAIR SERVICES
FOR *You!*



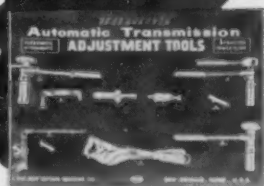
DRAW PROFITABLE NEW BUSINESS

**with these Eye-Catching
SERVICE KIT BOARDS**



**HYDRA-MATIC
Service Kit Board**

**Automatic
Transmission
Adjustment
Tool Board**

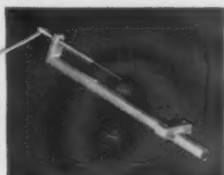


You *make* more — and *save* more — with these new, multi-purpose Tools by New Britain. The Universal Throttle Arm Gauge and Universal Throttle Arm Bender put you profits ahead in the big, new field of Automatic Transmission Service . . . require only a minimum Tool investment. Packaged complete with illustrated instructions, these top-quality mechanic's Tools are engineered to save time and trouble for you — give you the big advantages of easy use, accuracy and long service life. Make your shop *Headquarters* for **HYDRA-MATIC** Transmission Service . . . ask your Jobber for these money-making new Tools today!

Other New Tools for AUTOMATIC TRANSMISSIONS



**AMS-1 Open-Type Snap
Ring Remover**



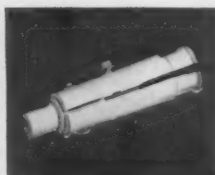
**ARS-1 Rear Servo Ring
Compressor**



**AOD-1 Oil Delivery Sleeve
Ring Compressor**



**AME-1 Mainshaft End
Play Checking Tool**



ASP-1 Seal Puller



New Britain

THE NEW BRITAIN MACHINE CO. • NEW BRITAIN, CONN.

HAND TOOLS

**Oil and filter both
need changing too!**



This version of the FRAM advertisement appears in *Collier's*, April 13, 1956.

**Full page ads and spreads in
SATURDAY EVENING POST, LIFE,
COLLIER'S, FARM JOURNAL and
POPULAR SCIENCE plus . . .**

**thousands of billboards sell
FRAM CLEAN OIL MONTH!**



Thousands of Clean Oil Month 24-sheet posters—above—and hundreds of painted bulletins—right—blanket major highways from coast to coast.



IT'S CLEAN OIL MONTH Change Oil and Filter NOW!

Regular oil changes and new FRAM Oil Filter Cartridges will help save your engine's pep, power and life for years. FRAM keeps your engine clean . . . traps deadly abrasives as small as one micron (.000039 in.) in size, yet will not remove detergents.

There's a FRAM Cartridge individually engineered for your engine—sold on a money-back guarantee. Get it at your nearby service station, garage or car dealer now, during FRAM Clean Oil Month.



FRAM CORPORATION
Providence 16, R.I.
Fram Canada Ltd.
Stratford, Ont.



FRAM GIANT \$110,000.00 CONTEST For dealers and Wholesaler Salesmen



YOU CAN WIN ONE OF 14 NEW FRAM-EQUIPPED CARS!

PLUS 1,204 other prizes! IT'S EASY —HERE'S HOW YOU CAN WIN!

All you do is estimate the number of filters FRAM will ship to manufacturers during the periods named on your Official Entry Blank. Each time you enter, you get two chances to win—once for a Half-Year Contest and once for a Whole-Year Contest. See your FRAM wholesaler salesman for entry blanks, rules and hints to help you win!

FRAM CORPORATION, Providence 16, R. I.
Fram Canada Ltd., Stratford, Ontario

PLUS this big FREE Clean Oil Month Dealer tie-in kit!

Automatic FREE delivery to FRAM Franchise dealers. Features a colorful streamer version of the national ad above, plus an animated display of the same chimps that spark Clean Oil Month ads!



Clearing House Continued from Page 130

this will help your mileage somewhat. Also make sure your timing is set properly. I would not recommend changing the axle ratio, it would involve a lot of expense and little would be gained by making this change. You could install a twin Dynaflo turbine but it would be necessary to purchase a new flywheel housing, a new converter

and a front shaft for your transmission. These changes would be very expensive.

Car is Sluggish, Gets Low Gasoline Mileage

I have a problem concerning a 1953 Ford V-8 with Fordomatic.

This car has performed well until recently when it lost its pep. Top speed is about 75 M.P.H., gas mileage about 12 M.P.G. Here is what has been done so far. New rings, valves ground, distributor overhauled, fuel pump checked, Fordomatic torn down and checked, carburetor renewed, valve timing and ignition timing checked, no dragging brakes and new plugs.

*Gerald Schlabach
Topeka, Indiana*



FLAME BOY HIGHWAY SAFETY FLARES

A "must" for every motorist. FLAME BOY Highway Safety Flares offer spectacular profit opportunities in a ready-made market. Every car needs this dependable safeguard.

Flame Boy is acclaimed as the most practical, most economical, easiest-to-use flare available to the motoring public.

Endorsed by leading insurance companies and safety engineers. Made from solidified hydrocarbon fuel. Will not melt or deteriorate. Ignites quickly. No fuss, no muss; no spark, no sputter. Burns with clear, steady flame for 30 minutes . . . even in wind and rain.

Three flares and matches included in handy can that fits glove compartment.

Order from your supplier or write to General S & M Corporation, giving supplier's name.

GENERAL S & M CORPORATION
Newington 11, Connecticut
Marketing Division of
Safety Fuel & Chemical Corporation, East Berlin, Conn.

Highway Safety

IS ALWAYS
GOOD BUSINESS

ABOUT the only thing you have not checked is the ignition coil. These coils if weak will make an engine sluggish. Another item worth checking is the exhaust system and the air cleaner. Check the exhaust and tail pipe for kinks also the mufflers for obstructions. Make sure the heat damper is working properly. Clean and reoil the carburetor air cleaner. I would recommend having this car checked on a dynamometer. You may find the ignition timing marks inaccurate.

Truck Cracks Five Engine Blocks at No. 6 Cylinder

We have a 1948 Ford F-6 truck in our shop which has cracked five blocks, all at No. 6 cylinder. We believe it is caused by the booster brake and axle shift vacuum setup, but we do not know how to cure it.

*Connor Auto Sales
Lansing, Iowa*

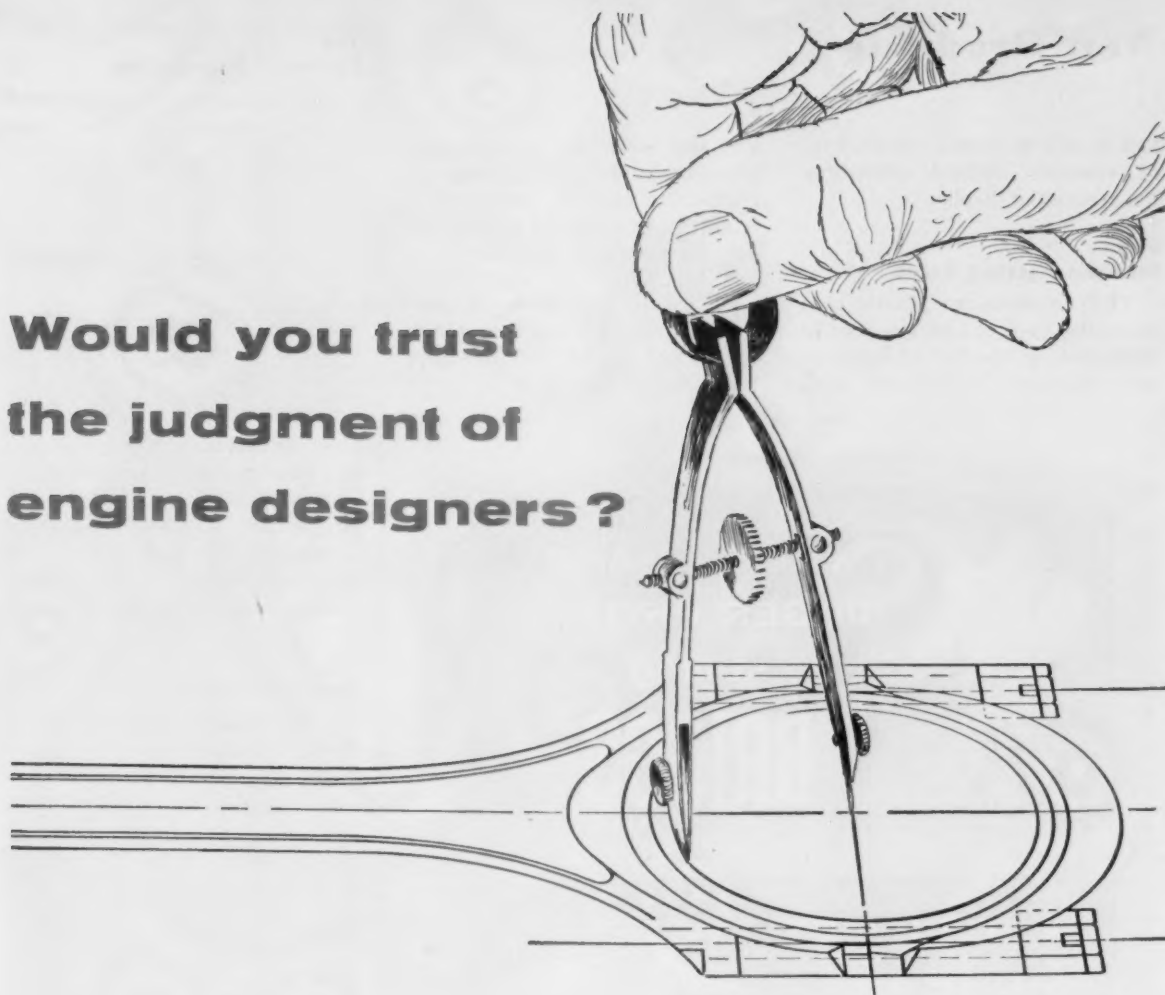
I HAVE never heard of this happening to any other Ford engine, but it seems likely that the vacuum might be causing it due to the cold air rushing in. Another point worth checking is the exhaust system, you might have back pressure from a bent pipe or a clogged muffler causing the block to overheat. Make sure the cooling system is doing its job properly. You might try a vacuum storage tank for reserve air or you could tap into the intake manifold at a new location.

A newborn infant was crying lustily in the infant's ward.

"What's the matter?" asked a visitor, peering through the glass partition.

"Look," said the ward nurse, "if you were only a few hours old—out of a job—and owed the government \$2,050, you'd bawl, too!"

**Would you trust
the judgment of
engine designers?**



YOU can bet your bottom dollar that engine designers know what they are doing when they specify bearings.

That's why *Monmouth** *Clevite** 77's are designed into more high-duty engines than any others. In fact, we build most of the original equipment bearings for internal combustion engines of all types!

If you respect the judgment of the men who designed your engines, you'll want to install *Clevite* 77 bearings when you tear down for overhauls.

These heavy-duty bearings will outlast all others.

Reports from fleet and commercial operators show bearings *still* good after 250,000 miles of severe service. Some report even *higher* mileages!

The secret of this long mileage is in the high fatigue resistance designed into *Clevite* 77 bearings . . . and in the precision fit.

And the method of building this high-duty bearing is exclusively *Clevite*'s!

Why not test a set of these bearings next time you tear down an engine? Your nearby N.A.P.A. jobber has the exact size needed for any engine.

*The words *Monmouth*, *Clevite* and *Micro* are registered trade marks of *Clevite* Corporation.

Monmouth
TRADE MARK
ENGINE BEARINGS

Clevite Service
The Cleveland Graphite Bronze Co.
Division of *Clevite* Corporation, Cleveland, Ohio, U. S. A.



*Your
NAPA Jobber
is a Good Man
to Know!*

New Products Continued from Page 92

and is said to permit the removal of cushions without disturbing the remaining display.

113 Grease Fitting Caps

YBF Corporation: Plastic caps marketed by this firm are said to help prolong the life of bearings and bushings by keeping dirt,

grit and water out of high-pressure grease fittings. The caps are claimed to stay in place over a temperature range of -40 to 200 deg. F., on wet or dry dirt roads, and through water and off-the-road conditions. Made of polyethylene the caps are resistant to grease and can be used indefinitely, the maker states.



DISPLAY RACK
Colorful, attention-getting display rack with assortment that takes care of 90% of your customers.



COUNTER DISPLAY
An action display that will catch the eye and get your customers to ask about shock absorbers.



DECAL
This decal will focus attention of BRIGGS Hydro-Muscle Ride Control; identify you as Briggs headquarters.



LITERATURE
Handout literature tells your customers why Briggs gives the "ride of your life—for the life of your car."

Sales helps like these and other sales-making aids, include lapel tags, steering wheel snap-ons and wall charts. So ask your jobber today how you can make \$18.88 PROFIT for an hour's work installing a set of BRIGGS Shock Absorbers.



BRIGGS

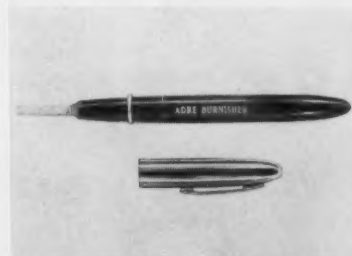
HYDRO-MUSCLE RIDE CONTROL

for the ride of your life—for the life of your car

Briggs Shock Absorber Company • 1148 Euclid Avenue • Cleveland 15, Ohio

114 Contact Burnisher

Adre Company: A pocket sized contact burnisher has been mar-



keted by this manufacturer. Fitted in a pen type case, the burnishing element is said to give mild abrasive action. The abrasive, while it removes dust, grit and carbon build-up, removes a minimum of contact metal, according to Adre.

115 Primer-Surfacer

Martin-Senour Company: A fast drying lacquer primer-surfacer called Neu-Sand Red Oxide has been marketed by this firm. The



product is said to be useable on bare metal as well as over old paint surfaces. According to the company, it is fast drying in any weather condition. In addition, it is said to permit sanding without sand paper gumming, even when applied in wet, heavy coats.

116 Small Bore Rings

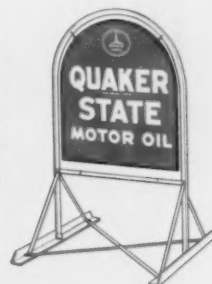
Wilkening Mfg. Co.: Dealer kits of Pedrick small-bore rings for popular outboard engines and also for small-bore industrial engines used in power mowers, and so on are now being produced by this
(Continued on page 138)



"Summer sure puts the spotlight on this one oil— Quaker State Medium HD!"

It's the one oil that meets every normal warm weather driving need . . . famous Quaker State Medium HD—refined from Pure Pennsylvania Grade Crude Oil. It's the quality motor oil that brings in steady returns.

You'll need plenty in stock, because last year showed us "one grade for warm weather" is a natural. All Quaker State products are getting the tremendous boost of their biggest advertising program. Order now!



QUAKER STATE OIL REFINING CORPORATION, OIL CITY, PA.

Member Pennsylvania Grade Crude Oil Association

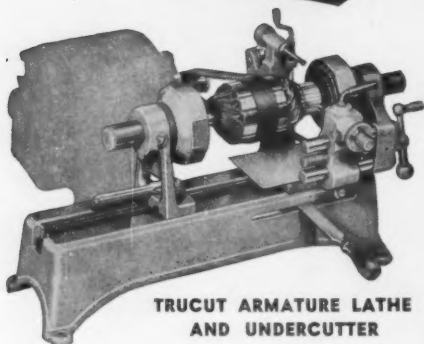
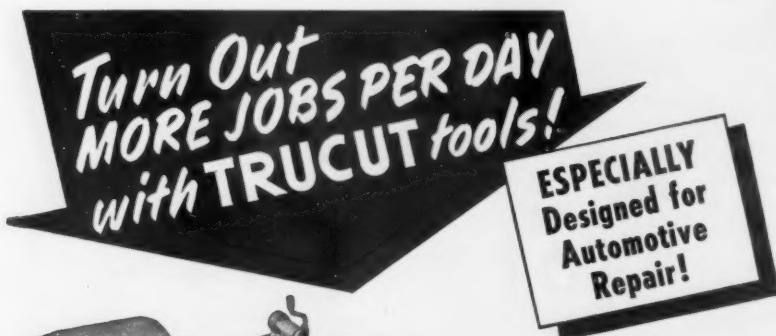
New Products Continued from Page 136

firm. There are 116 rings in the ODS outboard kit and 99 rings in the IDS industrial kit, both in the types and sizes needed for the most popular engines, it is said.

117 Rubber Lubricant

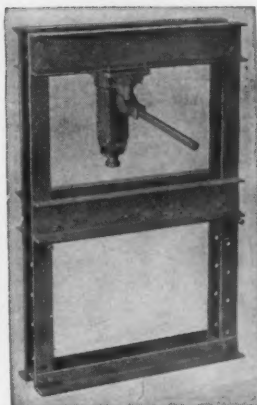
R. M. Hollingshead Corp.: This firm has marketed an all purpose

rubber lubricant labeled Tyre Ease. The lubricant is said to be useful in mounting and demounting tubeless tires. Said to be harmless to natural and synthetic rubber, it also serves as a lubrication for bushings and shackles, and as a dressing for black floor mats, and other rubber parts. Each package of Tyre Ease comes with a long-handled applicator.



TRUCUT ARMATURE LATHE AND UNDERCUTTER

For over 20 years TRUCUT equipment has more than paid for its own way for thousands of satisfied users. Especially designed for automotive repair work, it means steady extra profits, because it enables you to do more work in less time.



TRUCUT HYDRAULIC PRESS

TRUCUT also brings you new profits from jobs you may now send out. Enables you to machine and undercut commutators perfectly; test for shorts; make quick work of dismantling and assembling generators.



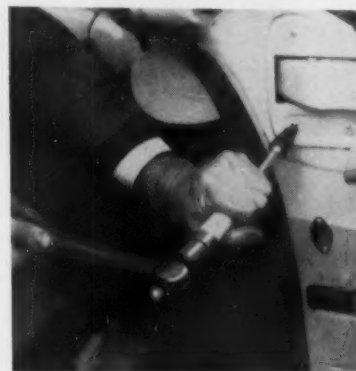
TRUCUT ARMATURE TESTER

FRANK N. WOOD CO.
... SINCE 1923
TRUCUT

334 W. Main St. • Waukesha, Wisconsin
Pacific Coast: 1330 W. Olympic Blvd., Los Angeles

118 Impact Screwdriver

Alba Tool Company: This manufacturer has marketed an impact screwdriver for loosening hard-



to-move screws. Simple to operate, the tool will remove rusted, bound into position or mutilated screws, according to the company. To operate, the blade is placed into the screw slot and the handle is sharply struck with a hammer.

119 Refinishing Outfits

Binks Manufacturing Co.: This firm has introduced three car refinishing outfits with infra-red drying ovens. Each of the outfits



is a "package" containing everything a shop needs to refinish a certain number of cars per day. For instance, one outfit consists of a combination spray booth and drying chamber, 56 feet long. A bake oven, heavy duty spray painting unit, touch-up outfit, flock gun, undercoating unit, air compressor and accessories complete

(Continued on page 144)

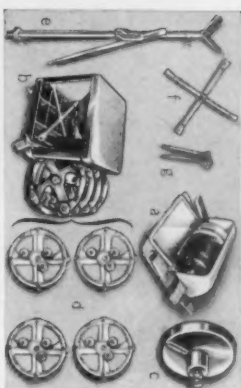


At last! on the car balancing comes into its own as a Big-Profit, **MAKE-MORE Service!**

You MAKE-MORE MONEY with Bear's exclusive simplified operating method, featuring new, super-fast, super-accurate "Speedi" Adapters.

You MAKE-MORE BALANCING SALES with the one-and-only "Jiggler"! Amplifies slightest amount of unbalance to demonstrate need for balancing. Nothing like it to sell the job ... nothing like it to prove balancing perfection!

You MAKE-MORE PROFITS because Bear puts your grease or alignment rack on double-duty! Space limitations are no longer a problem—balance on rack or floor!



You GET MORE Too!

Bear helps you MAKE MORE because you get more tools and accessories to do a better, faster balancing job. Typical On-A-Car Balancing Service No. 365 includes: (a) spinner, (b) work seat with tool trays, (c) balance unit, (d) 4 adapters, (e) Jiggler, (f) lug wrench and (g) weight pliers.



Yes, you MAKE MORE in EVERY WAY! Yet, ^{as} **\$30.00** little ^{as} **DOWN** is ALL you pay!

It's the NEW 1956 BEAR
MAKE MORE
On-A-Car BALANCER

(Registered U. S. Patent Office)



THIS IS NO

...a check of accepted

Original Equipment Record on the use of special materials and asbestos treated shells

	COATED MATERIAL			COVER ONLY			ASBESTOS	
	1955	1954	1953	1952	1951	1950	1949	1948
BUICK								
CADILLAC								
CHEVROLET								
CHRYSLER								
DESOTO								
DODGE								
FORD								
HUDSON								
LINCOLN								
MERCURY								
NASH								
OLDSMOBILE								
PACKARD								
PLYMOUTH								
PONTIAC								

Walker "Precision Tuning" provides special coated materials and asbestos treated shells as shown on the chart above

SHELL GAME!

*original equipment standards proves
Walker "Precision Tuning" provides the right
shell construction for each individual engine!*

Here is one place where people can really get fooled. To the average car owner most mufflers look pretty much alike—from the outside. And the shell is just something to hold the "insides in" and resist external corrosion.

This, of course, is furthest from fact. As horsepower has increased and muffler designs have changed to meet new requirements, *proper shell construction* has become increasingly important in the control of objectionable shell noise. And the use of special coated materials to increase corrosion resistance has become an accepted standard industry practice.

Note on the chart at left the complete recognition in 1955 by all car factories of the necessity for coated materials and special shell treatment.

Particularly noticeable, also, is the relationship of asbestos-treated shells to the higher horsepower engines as shown on the chart of original equipment standards. Not only are asbestos-treated shells essential to the proper control of shell noise on these high-horsepower engines—but, because asbestos treated shells maintain internal temperatures at a higher level, they also greatly

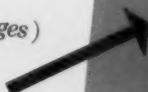
increase the life of the muffler by more effectively reducing corrosion. This extra advantage is completely overlooked by most "replacement" muffler manufacturers.

There is no one shell construction or combination of materials that meets the different requirements of the many different engines. To provide the right combination of the right shell construction and the right shell materials, there are 18 different shells used in the production of Walker "Precision Tuned" Silencers. And this does not include the many variations in cross section, round and oval, or the variations in length to assure proper clearance and fit.

Of course, it is cheaper, and far easier, to standardize on a few shell designs which claim to be "cure-alls." But car factory standards have found no such simple solution to the problem of shell noise and corrosion.

It isn't weight or gauge of material that makes a long lasting muffler. It's the right combination of materials . . . internal design . . . and shell construction that give Walker "Precision Tuned" Silencers the proper performance and endurance for each individual engine.

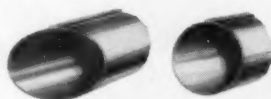
(For further discussion of special coated materials, see next pages)



There are 18 different shell constructions used in



Single
Wrapped
Lock Seam
Plain Steel



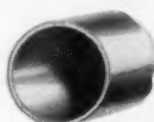
Single
Wrapped
Lock Seam
Hot-Dipped
Zinc-Coated
Steel



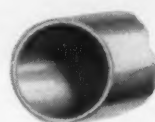
Single
Wrapped
Lock Seam
Aluminum
Coated Steel



Double Wrapped
Lapped Seam
with Cover
Plain Steel



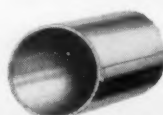
Double Wrapped
Lapped Seam
Plain Steel with
Asbestos Insert



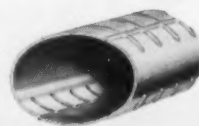
Double Wrapped
Lapped Seam
Hot-Dipped Zinc-
Coated Steel with
Asbestos Insert



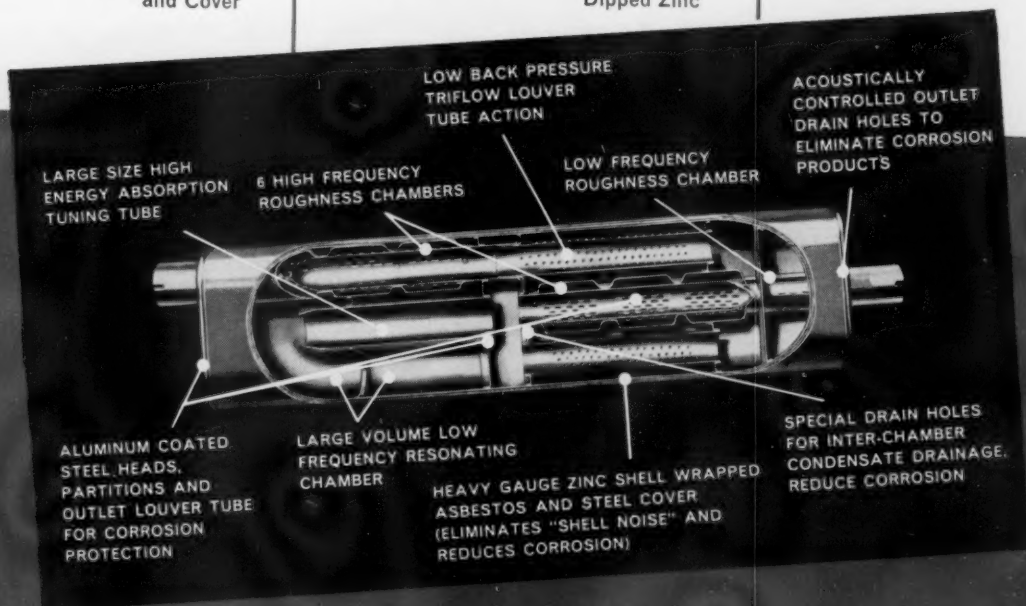
Single
Wrapped
Lock Seam
Plain Steel
with Asbestos
and Cover



Single
Wrapped
Lock Seam
with Liner
Both Hot-
Dipped Zinc



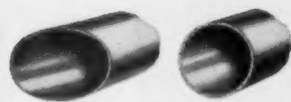
Double
Wrapped
Lapped Seam
Ribbed
Plain Steel



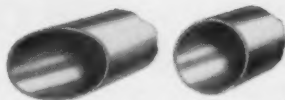
IT TAKES...THE RIGHT THINGS TO MAKE A TRULY

WALKER

"Precision Tuning"



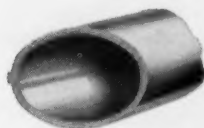
Double
Wrapped
Lapped
Seam
Plain Steel



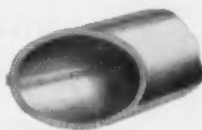
Double
Wrapped
Lapped
Seam
Hot-Dipped
Zinc-Coated
Steel



Double
Wrapped
Lapped Seam
Hot-Dipped
Zinc-Coated
Steel with
Cover



Double
Wrapped
Lapped Seam
Plain Steel
with Asbestos
and Cover



Double
Wrapped
Lapped Seam
Hot-Dipped
Zinc-Coated
Steel with
Asbestos and
Cover



Single
Wrapped
Lock Seam
Hot-Dipped
Zinc-Coated
Steel with
Asbestos
and Cover



Double
Wrapped
Lapped
Seam with
Ribbed
Cover
Plain Steel



Double
Wrapped
Lapped Seam
Hot-Dipped
Zinc-Coated
Steel with
Ribbed Cover



Heavy Duty
Truck
16-Gauge
Plain Steel

WALKER

"Precision Tuned" Silencers

WALKER MANUFACTURING COMPANY OF WISCONSIN • RACINE, WISCONSIN
Exhaust Silencers • Oil Filters • Jacks



COMBINATION OF ALL GREAT EXHAUST SYSTEM

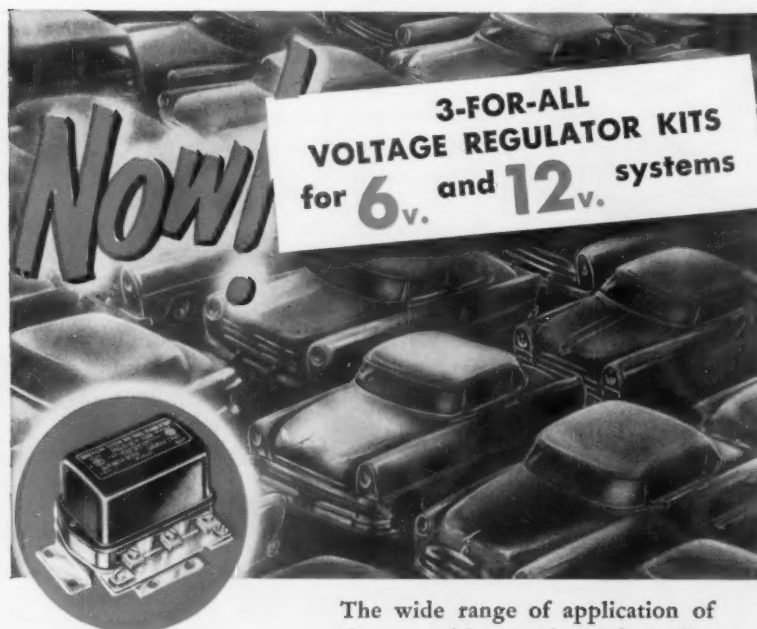
New Products Continued from Page 138

the package. All three outfits are illustrated and described in a bulletin available through Binks.

120 Battery Charger

Buckeye Stamping Company: A small battery charger in models for either 12 or 6-volt storage batteries has been marketed by

this firm. Said to be usable with AC or DC current, "Battery Buoy" is claimed to bring a dead battery up to starting strength quickly. The unit will completely recharge a battery in 24 to 36 hours and will not overcharge the battery, it is claimed. "Buoy" plugs into 110-volt 60-cycle current, and connects through color-coded leads.



TWIN COUNTER MERCHANDISER
Assembled from 12-volt 3-For-All Kit and 6-volt 3-For-All Kit. Covers practically all 6v. and 12v. vehicles with minimum, sales active stock.

The wide range of application of these precision engineered, quality built Voltage Regulators makes them easier to stock and sell. Millions are in use as original equipment. Now, there's a new 3-For-All Kit, with only 3 Regulators, to fit practically all cars and light trucks with 12v. systems. This handy, compact, counter merchandiser can be displayed separately or set up in combination with the popular 3-For-All 6v. Kit. All these famous Regulators are competitively priced to give you big replacement service volume. American Bosch, Springfield 7, Mass. A Division of American Bosch Arma Corporation.

AMERICAN BOSCH



121 Absorbent Cart

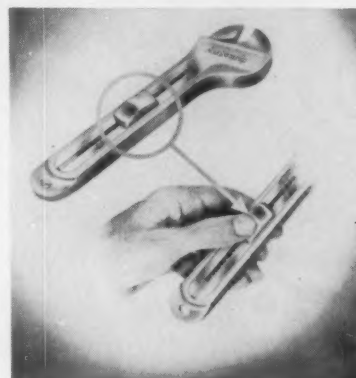
Waverly Petroleum Products Co.: A multi-purpose cart has been introduced by this company



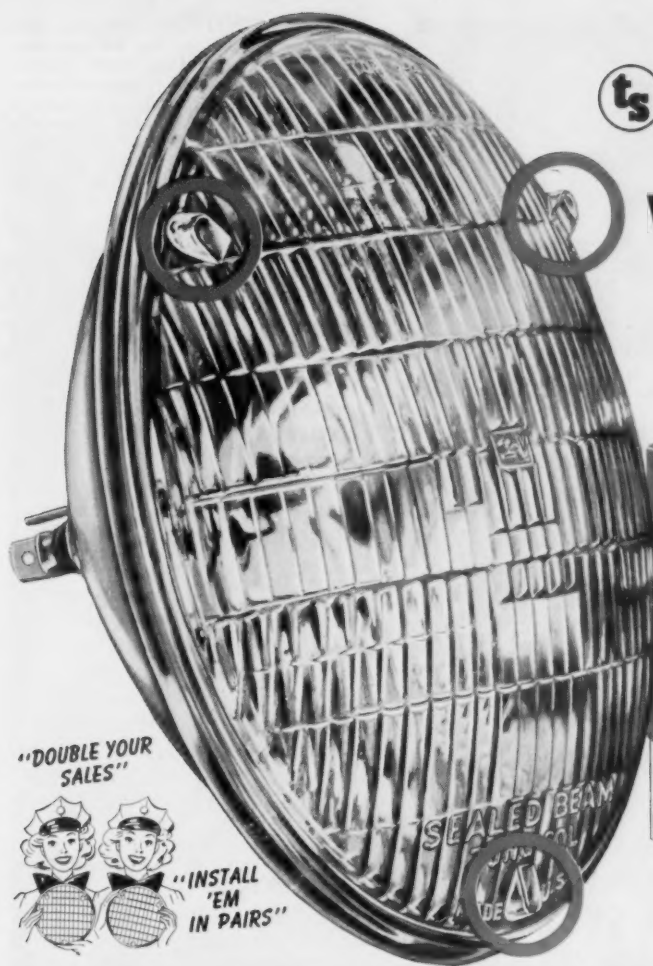
for use in spreading, storing and disposing of oil and grease absorbents. The unit is said to spread material evenly on all types of floors and is equipped with wide semi-pneumatic tires, a handle made of heavy gauge steel tubing and steel legs. According to the maker, use of this cart prevents waste of absorbent.

122 Adjustable Wrench

BMS Enterprises: An automatically adjusted wrench, the Auto-Grip, is now available from this firm. The eight and one-half



ounce crescent type wrench is said to have a forged aluminum handle and steel lower jaws with an insert steel lip. Made in four sizes, the wrench can be adjusted by slight pressure on the adjustable button on the handle. Once pressure has been released from the adjustable button, the wrench will lock in position, according to the maker.



TUNG-SOL®

VISION-AID HEADLAMPS

5040-S for 6 volt passenger cars
5400-S for 12 volt passenger cars
5440-S for 12 volt trucks and buses



NOW WITH E-Z AIM PLATFORMS

FOR USE WITH ANY APPROVED AIMING DEVICE

The new improved Tung-Sol Vision-Aid Headlamp can be quickly adjusted with any approved aiming device—or can be aimed visually. Three E-Z Aim Platforms, precision-molded on the face of the lens, provide contact points for all the new mechanical aimers. They assure accurate beam adjustment in a matter of minutes—even in broad daylight. These headlamps are fully interchangeable with all sealed beam headlamps of the same voltage.

Car owners benefit from wonderful new safety features of all Vision-Aid Headlamps: The new, more powerful beam gives 80 extra feet of seeing distance down the right side of the road; filament cap and new lens design improve visibility in rain, fog and snow.

Most new cars and all earlier models are a big market for pairs of these safest of all headlamps—the Vision-Aid Headlamps with the E-Z Aim Platforms. See your Tung-Sol distributor for full details.

TUNG-SOL ELECTRIC INC., NEWARK 4, N. J.

Sales Offices: Atlanta, Columbus, Culver City, Dallas, Denver, Detroit, Melrose Park (Ill.), Newark, Philadelphia, Seattle. Canada: Montreal.





NEW PATA OFFICERS—recent elections for officers of the Philadelphia Automobile Trade Association resulted in the following slate of officers taking office: from left to right (photograph at left) are Ray Norton (Chevrolet dealer), treasurer; Raymond P. Scott (Oldsmobile dealer), president; Guy Hayden (Pontiac dealer), vice president; and Ken Duncan (Lincoln-Mercury dealer), secretary.

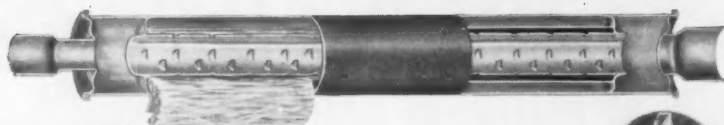
Kendall Discusses Battery Industry

"The battery industry has broken out of its stagnant position and is embarked on a product program which will have far reaching effects in so far as the battery manufacturer, the car builder, the battery merchandiser and the general public are concerned," T. L. Kendall, manager of Delco Battery Engineering and Replacement Sales, Delco-Remy Div. of General Motors Corp., said recently before delegates to the annual meeting of the Western Division, Oil Industry TBA Group.

Pointing out at the San Francisco meeting that the adoption of 12-volt electrical systems in modern passenger cars has "triggered a reaction in the battery field that was long overdue," Kendall declared that changes in product design and manufacturing techniques are providing 12-volt batteries with substantially longer life characteristics than "yesterday's six-volt batteries."



Grand DUAL EXHAUST SYSTEMS and DUAL EXHAUST HEADER SYSTEMS



New Grand HIGH-EFFICIENCY QUIET-TONE FIBERGLASS PACKED MUFFLERS

Attention
All Dealers!

Guaranteed To Fit All V-8 Cars and 6 Cyl. Chevrolets

In most instances, factory-installed optional duals are not available as an accessory kit. The demand from your customers whose cars are not equipped with duals is tremendous. Additional horsepower for their cars means additional profits for you.

Grand manufactures perfect fitting duals for all V-8 installations.

DUAL SYSTEM	DUAL HEADER SYSTEM	MAKE AUTOMOBILE	DUAL SYSTEM	DUAL HEADER SYSTEM
DUAL SIDE HEAD PIPE	EXHAUST HEADERS	Buick V-8	1953-54	
ORIGINAL EXHAUST PIPE	HEADER EXTENSIONS	Cadillac V-8	1950-51	1950-51
TWO GRAND MUFFLERS	TWO GRAND MUFFLERS	Chevrolet V-8	1955-56	1941-56
ORIGINAL TAIL PIPE	DUAL SIDE TAIL PIPE	Chrysler V-8	1951-54	
DUAL SIDE TAIL PIPE	ORIGINAL TAIL PIPE	De Soto V-8	1952-54	
		Dodge V-8	1953-54	
		Ford V-8	1935-56	1937-56
		Hudson V-8	1955-56	
		Lincoln V-8	1949-54	1949-54
		Mercury V-8	1939-54	1939-54
		Nash V-8	1955-56	
		Oldsmobile V-8	1949-56	1949-55
		Parkard V-8	1955-56	
		Plymouth V-8	1955-56	
		Pontiac V-8	1955-56	
		Studebaker V-8	1951-56	

Order Grand duals from your Grand jobber today!

GRAND AUTOMOTIVE PRODUCTS
2055 Ruby Street • Melrose Park, Illinois



**ONLY 2 LACQUER COATS WITH
THIS NEW DUCO THINNER?**

**YES, AND HARDLY ANY
COMPOUNDING!**



DUCO® EQUAL MIX Thinner cuts spraying in half ...practically eliminates compounding!

New "Duco" Equal Mix Lacquer Thinner gives you the correct film thickness with *less than half the coats*—in *less than half the time*. And the lacquer dries with such a high gloss that little or no compounding is needed! This makes it perfect for two-toning and over-all lacquer jobs.

Premium-quality Equal Mix Thinner is designed for glass-smooth color flow-out without sags and runs. It's specially made to minimize swelling of sand scratches in old lacquer coats. Yet it costs less at the gun than many "low-cost" thinners, because you use up to 50% *less thinner*.

There are other timesaving "Duco" thinners, too.

For example—No. 3717, famous for trouble-free jobs and mist coating, and No. 3711 lift-resistant thinner for faster drying, even in cold shops. Your Du Pont jobber will be glad to recommend the right "Duco" thinner for best results on your lacquer jobs.

DU PONT REFINISHING MATERIALS



REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

New Method to Make Auto Engine Blocks

A new way to manufacture automobile engine blocks has been developed by Perfect Circle Corp. research engineers, reported Ralph Teetor, president of Perfect Circle, Hagerstown, Ind., recently.

Details of the new block design were outlined by Teetor and Arthur M. Brenneke, Perfect Cir-

cle's chief engineer. The new block design, Brenneke said, would eliminate or drastically reduce the costly baked sand coring now used in engine block construction. In the Perfect Circle design, the engine cylinders and top deck are not included in the casting of the block, but are a separate assembly.

Silver Brazed

The centrifugally cast iron cylinders are silver brazed to a steel

top deck. The unit is sealed to the block by a paper neoprene gasket and the lower ends of the cylinders are sealed by rubber rings where they pass into the crankcase.

Teetor reported that one major automobile manufacturer already is testing the new design and that other leading manufacturers plan to test it. "It should be possible to produce an engine of this design at somewhat less than the cost of present block manufacturing methods," he said.

Brenneke explained that the new design will result not only in a more durable engine, from the motorist's point of view, but also has many advantages to manufacturers. Among these he listed:

Larger cylinder diameters are possible on given cylinder center distances; softer iron can be used in the block proper, which will permit up to 25 per cent more blocks to be machined on a given set of machine tools.

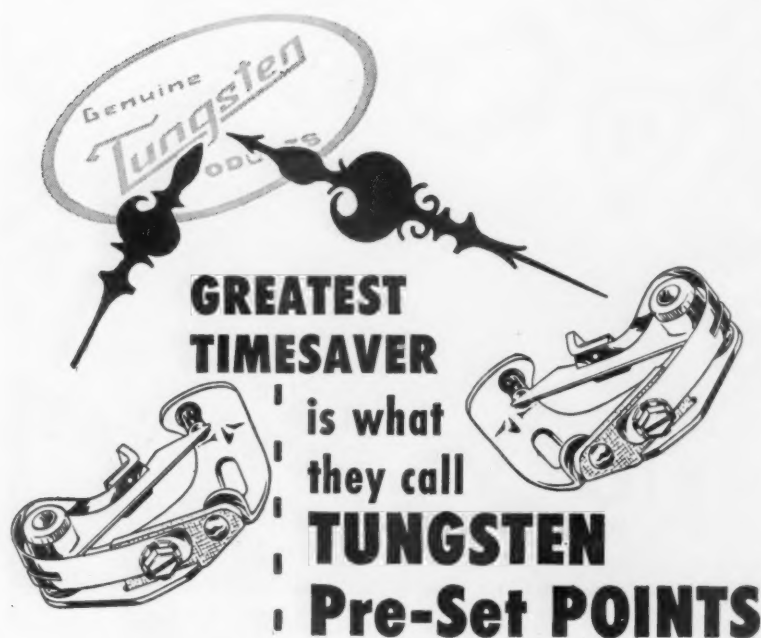
"With this design," Brenneke added, "it is possible to readily build engines of a considerable range of bore sizes on the same basic block."

Shock Absorbers Vital to Safety

Frank Kurtis, designer and builder of many of the race cars that ran in the 1955 Indianapolis Race, pointed out recently that the often neglected shock absorbers are of vital importance on all types of vehicles on our highways today.

Kurtis said: "After years of building and testing cars for the grueling '500,' I have definitely decided that the three most important factors affecting the safety of race cars and private cars alike are brakes, tires, and shock absorbers.

"The first two have been well-known safety factors for years while shock absorbers have more or less been overlooked until recently when it has become evident that good shock absorbers are of vital importance in controlling the soft, whippy springs being built into today's automobiles."



**GREATEST
TIMESAVER**

is what
they call
**TUNGSTEN
Pre-Set POINTS**



If you haven't received your FREE copy of the new Tungsten Merchandising Assortment catalog, better write at once!



Contact TUNGSTEN
for TUNGSTEN
CONTACT IGNITION

**MOST IMPORTANT — TUNGSTEN CONTACT
IGNITION IS DELIVERED TO YOU
AT A DOWN-TO-EARTH PRICE!**

TUNGSTEN CONTACT MFG. CO. North Bergen, N. J.

Tungsten has done everything but place these points in the distributor! They've been perfectly aligned and pre-assembled at the factory to save precious installation time — especially in those hard-to-get-at distributors. Tungsten Pre-Set Points are designed to do the job better and to take the guesswork out of installation.

Tungsten Pre-Set Points take mighty rough treatment because the bushing is set on a non-floating fixed point. They can't ever go out of alignment. The contact areas are made of high-amperage tungsten to carry the loads longer with hardly any burring or pitting. The contact surface of the tungsten disc on the stationary bar is convex. That's what makes for equalized heat distribution.

Passenger car and heavy-duty units are available for either left or right side installations in most popular 6 and 12 volt systems from 1937 thru 1955. Make sure you have some of these Tungsten Pre-Set Points on hand. They're the greatest time-saver ever!



**Restore "peak" power
and low-cost mileage
in worn engines**

with BUICK
FACTORY ENGINEERED

Krome Piston Rings



See Section 2-E in Your Buick Shop Manual

Krome Compression Rings restore peak-performance power—are factory-seated for fast break-in—stand up better under high-compression heat and load.

Krome Oil Rings assure lasting low-cost

oil control—even in out-of-round bores—with chrome-faced steel rails and exclusive Full-Flow Spring flexing.

Buy Krome Ring Sets From Your Buick Dealer—at your full discount.

Did You Know that the Buick engine is most compact of the big V8's—and develops the highest horsepower per pound of engine?

BETTER WORK WITH

FACTORY ENGINEERED PARTS

ENGINEER APPROVED ACCESSORIES



FACTORY ENGINEERED PARTS

SEE YOUR BUICK DEALER — Your One-Stop Source for Buick Parts



HENRY FORD II, president of Ford Motor Company, stands by as Ben D. Mills, company vice president and Lincoln Division general manager, breaks ground for the Division's new plant and office building in Novi Township, 28 miles northwest of Detroit. The new Lincoln headquarters, scheduled for completion in mid-1957, will cover 1,500,000 square feet and house more than 5,000 employees. Ground-breaking ceremonies, attended by company and township representatives, were held recently.

Anyone who tells you what is wrong, and helps to make it right is your friend.

SILOO® presents a NEW money-making DUO

...Two SPECIAL products for Two SPECIAL problems!



HYDRA-VALVE KLEEN

SILOO HYDRA-VALVE KLEEN is an exclusive blend of ingredients designed to quiet noisy hydraulic valve lifters, free sticky lifters, valves and rings. HYDRA-VALVE KLEEN cleans thoroughly, prevents further formation of deposits. It relieves engine troubles as you drive! HYDRA-VALVE KLEEN is perfectly safe to use. Add it to any type of motor oil - regular, premium, detergent or heavy duty. Sell it with every oil change. Available in pint cans.

TRANSMISSION KLEEN

SILOO TRANSMISSION KLEEN is safe to use in all automatic transmissions. Added to the transmission fluid, it maintains and restores the full efficiency originally engineered into the unit. It prevents the formation of gums, sludge and corrosion. It smooths out automatic transmissions, eliminates hesitation, rough shifting and between-speeds lurching. Also increases the efficiency of the up-shift and downshift action. Available in pint cans.

Write for catalog



OIL ADDITIVE AND TUNE-UP

Fast-acting! Effective! Ideal for tune-up and break-in. Reduces engine and piston wear. KEEPS THE ENGINE CLEAN!



PETISOL 404 DEGREASER CONCENTRATE

Quickly removes grease and grime. Dilute with kerosene or fuel oil. Spray or brush on.



DIESEL FUEL CONDITIONER

For all diesels. Keeps injectors clean. Eliminates hard starting, pounding, excessive smoking. Keeps fuel lines open.

PETROLEUM SOLVENTS CORPORATION, 331 Madison Avenue, New York 17, N. Y. In Canada - Montreal, Que.

GM Conducts Course In Air Conditioning

A special course to train dealer personnel in the installation and servicing of automotive air conditioning is being conducted by Chevrolet at key points throughout the country.

The sessions, which are being held at General Motors Training Centers and some dealership locations, are in conjunction with the company's introduction of a new accessory air conditioning unit. The conditioner is designed to be installed by dealers in either V8 or six-cylinder cars. The training program also includes servicing of factory-installed models.

Eight regional technicians, who completed a recent preparatory course at Detroit, returned to the field during March to conduct the training classes.



"Well, we made it. Fortunately every road turned when she turned."



"MAN!-
don't pass
this one up!"

**The 2 Greatest Buys
in Body Repair
Equipment...**

**P-F BODY REPAIR EQUIPMENT
"START-A" SETS**

\$59⁷⁵

— Priced as low as



"P-F" Midget Body Repair Kits have always been the top values in their field — because they save job hours, cut labor costs! Particularly the **SPEED MIDGET**, with the "Push-Twist" **EZ-E-ON** Attachments... Now, they are available in efficient "Start-A" Sets that include all the equipment needed to do all average body repair jobs — at prices so low that they strongly invite you to put "P-F" performance to work for you **RIGHT NOW**. Later you can order additional attachments as needed...

Now- fastest, lowest cost work, with the
PF-10 ~~SPEED~~ Midget "START-A" SET
- with "Push-Twist" **EZ-E-ON** Attachments



Designed by practical body men to speed repair work — the **SPEED MIDGET** saves 70% of "hook-up" time; 90% of "take-down" time as compared to threaded equipment. But, that's only half the story... You have all the power you need with the **SM-200 3 ton, super-speed JACK** — Only 30 strokes for full extension of ram — versus 60 and 70 for its competitors! Tubing gives a long 48-inch span — compared with 33 and 38 for the others! **PUMP STROKES PER INCH OF RAM TRAVEL** ARE A VERY LOW 6-1/3 — against 12 and 15½ strokes for competition! And — the closed height of the "P-F" **RAM** is less than all others; which means that it can get into tighter places, do more jobs! No wonder good body men go for the **P-F SPEED MIDGET** — and its faster, easier work, increased earning power — and the boss likes those extra profits per job!

\$66⁰⁰

PRICED AT ONLY

And- the finest thread-type "buy"!
PF-9 HYDRO-MIDGET "START-A" SET

Has all the work-speeding features of the **SPEED MIDGET** — except the **EZ-E-ON** Attachments. Three couplings give a 40-inch tubing span. Same as the unit pictured above except that tubing and attachments are threaded. The choice of those who like threaded equipment.

PRICED AT ONLY

\$59⁷⁵

Order either set — **NOW** — from your jobber, to assure early delivery. Or write to us for literature.

**P-F BODY REPAIR
TOOLS and EQUIPMENT**

Automotive Division of
H. K. PORTER, INC., Somerville, Mass.

Service Suggestions

New Spacer Needed After Disconnecting Fuel Line

Always install a new spacer at the outlet of the fuel tank on Cadillacs whenever the fuel line is disconnected from the tank. This precaution is necessary in order to assure a perfect seal between the tank and fuel line. The spacers are manufactured of a soft metal that shapes itself to the contour of the fuel line tubing ends as the connecting fittings are tightened. If the old spacer is reused, a vacuum leak could develop at the connection, possibly causing vapor lock in warm weather.

Binding Pedal Linkage Causes Brake Drag

A possibility exists of the brakes hanging up or releasing too slowly on 1956 model Cadillac cars. This may be due to interference between the pedal to Power Brake unit rod and the toe-board.

The binding condition can exist in several places, all of which should be checked by servicemen at the time of new car pre-delivery conditioning. These locations are at the brake rod to relay connection, the pedal rod at the toe-board hole, and the pedal rod to the felt air seal retainer.

Clearance of the brake pedal to relay rod at the opening in the toe-board should be checked to determine if any interference exists at this point. The clearance should be checked by pulling back the protective boot from the toe-board and observing the rod clearance. With the pedal in the applied position the rod should have a minimum of $\frac{1}{8}$ in. clearance.

Insufficient clearance at the side may be eliminated by moving the pedal attaching bracket at the support mount laterally or by enlarging the hole in the toe-board. Adequate clearance at the bottom can be obtained by enlarging the hole in the toe-board.

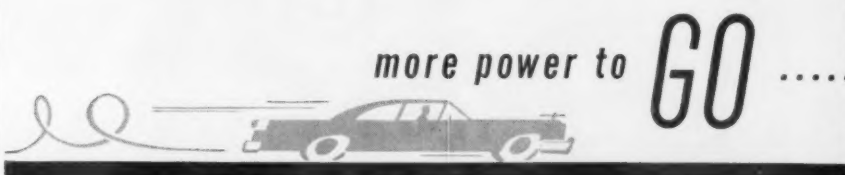
Binding of the pedal rod is also possible at the metal retainer over the felt seal on the inside of

the toe-board. The hole in the retainer should be centralized around the rod. This may be adjusted by removing one screw from the retainer, rotating the entire seal and retainer on the remaining screw, punching or drilling a new hole, and reinstalling the screw.

When adjusting the Power

Brake linkage, check for interference of the relay-to-brake rod clevis at the relay connecting point. With the brakes in the fully released position, the clevis pin should fit easily into the hole. If it does not fit evenly due to misalignment of the clevis and relay, stock must be removed from the relay to allow the free entry of the pin.

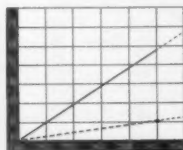
Before making any repairs to eliminate rod binding, check the



World Bestos "Prescribed Friction" brake lining solves the tough brake problems encountered in servicing today's high horsepower cars. And it gives your customers better, safer brakes!

this is the story:

Today more than 60 million cars and trucks crowd our streets and highways. The average horsepower of 28 cars and models has increased 50% in the past 5 years. In some cases horsepower has nearly doubled. Yet during this same period the average braking area on the same cars has increased only 10%!



Solid line shows average HP increase compared with average increase in braking area (dotted line). Source: Motor Age, July '55.

Better Brakes . . . a necessity—More power under the hood means fast "get-away" in traffic, faster passing speeds and higher sustained speeds on the highway. Therefore, brakes must be more powerful, more dependable and more durable than ever before . . . to keep high horsepower under control and stop it safely under all conditions.

The LINING is the answer—Because braking areas have not increased in proportion to horsepower and speed, *brake lining* must supply the greater stopping power required by modern cars. Obvi-

ously, this must be a superior lining by every standard of comparison.

Customers depend on YOU for Safe Brakes

—The average car owner takes good brakes for granted and depends on them to stop him safely in any emergency. When he has trouble or comes in for a reline he expects you, his "brake expert", to supply the right lining for his car . . . and for today's traffic conditions.

World Bestos "PF" Dry-Mix Lining proves its superiority . . . 3 WAYS!

● **Stopping Power:** Top quality World Bestos "Prescribed Friction" Sets are made up from 7 different frictions, assuring dependable stopping power for modern high horsepower cars . . . whether power or standard brakes are used. "PF" stopping power must prove itself by giving 12 panic stops in rapid succession from 70 miles per hour!

● **Fade Control:** At high temperatures ordinary brake lining loses friction. It fades. World Bestos "Prescribed Friction" lining gives you *stable friction* to overcome this dangerous condition. "PF" must prove itself by *fast recovery*

brake pedal itself for correct horizontal position in the car as viewed from the seat. The pedal can be levelled by shimming between the attaching bracket and the steering column support. This will alter the location of the pedal rod in the toe-board hole and felt retainer. For this reason, the level of the pedal should be checked and corrected first, before investigating for binds at other points.

Remedy for Turn Signal Wiring Harness Shorts

On some early production 1955 Pontiacs, the direction signal wiring harness contacts the gearshift lever support at the upper end of the steering column. On these cars the continual movement of the support, during shifting, chafes the wires and eventually cuts through the insulation causing a short circuit. This causes the direction sig-

nal fuse to blow, making the direction signal and the hand brake warning lamp inoperative.

When this condition is encountered, remove the direction signal control assembly and replace the wiring harness and switch base assembly. Route the new wiring harness in the guide clamp and push it down through the clamp until it lies flush against the underside of the housing. Then bend the clamp around the harness to hold it securely in place. Before reinstalling the control assembly, bend the clamp and harness toward the center of the housing to make sure it will not contact the gearshift lever support.

takes more power to

WHOA!

after brake temperatures have risen to 600° or 700° F.

● **Long Wear:** High friction lining wears rapidly and produces excessive brake temperatures. Therefore, the high frictions required for maximum stopping power cannot also supply adequate fade control and long wear. World Bestos "Prescribed Friction" lining, using seven different frictions, solves this problem by skillful formulation and by combining frictions. Thus, different (but carefully matched) frictions may be used in a single "Prescribed Friction" set to produce the most favorable combination of stopping power, low fade and long life.

"PF" Sets are Engineered for the Car Owner... and for the Brake Shop! A car owner gets brakes so dependable he can forget them when you give him World Bestos "PF". For this fine quality dry-mix lining is engineered for his car. He gets brakes that will stop safely every

time, without fade... throughout a long life of trouble-free service.

"PF" Sets make your job easier because they are engineered for perfect fit... and because their superior performance eliminates many of the difficulties and "comebacks" you may experience with the ordinary run of brake lining.

SO... give yourself and your customers the many benefits of World Bestos "Prescribed Friction", the finest brake lining for modern, high horsepower cars.



"Prescribed Friction". 4-piece, single axle sets for all passenger cars; available for riveting or bonding; superior performance for standard or "power" brakes.

Start now! Call your World Bestos distributor or mail this coupon for full information and prices!



Remember—
STOPPING POWER IS THE SAFEST
POWER A CAR CAN HAVE!

World Bestos NEW CASTLE, INDIANA

Please send full information and prices on "PF" (Prescribed Friction) Brake Lining Sets for passenger cars.

Company Name.....

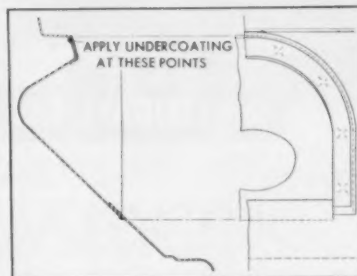
Address.....

City..... State.....

Your Name and Title.....

Eliminating Gas Fumes in Luggage Compartment

Gasoline fumes in the luggage compartment of a Lincoln may be coming through the weld seam where the lower back panel is



joined to the gas tank filler pipe outer housing. This condition can be eliminated by applying undercoating to the weld seam. As an added precaution, apply undercoating around the license plate bracket attaching nuts and bolts.

Do Not Overfill Chev. Oil Bath Air Cleaner

Service specialists are cautioned not to overfill the Chevrolet oil bath air cleaner to the point where the oil level contacts the mesh screen at the bottom of the filter element. If the filter is overfilled, an air block results and fuel vapors are pulled down into the crankcase. The presence of such vapors is detrimental to lubrication and in heavy accumulations can result in crankcase explosions.

Cleveland Dealers Hold Seminar Series

By T. M. Rohan

Cleveland auto dealers are trading secrets—for their own betterment and to improve service to and confidence of the public.

Cleveland dealers under the sponsorship of the Cleveland Auto Dealers Assn. recently completed a series of down-to-earth seminars

at Fenn College. This experimental institute was watched carefully with the idea of future programs on a national scale. It was an outgrowth of several neighborhood type talks given by Walter Grabski, president of the association, which revealed many dealers face similar retailing problems.

Eight weekly evening sessions were held at the college under the direction of Prof. John W. McNeill, chairman of the department of

management. Initially, neighboring dealers in Willoughby and Painesville, O., are considering starting programs. Enthusiastic reaction has led both the CADA and Fenn college to consider a repeat next semester.

Traded Information

At the meetings 25 dealers traded specific information on selling costs, volume, markup, expense and profit analysis of actual operations, true cost of selling new and used cars, how to buy used cars, office practices and procedures, credit controls, profits in parts, service, body and paint departments and finding and keeping the right man on the job.

At one session on personnel, William Michaels, president of Michaels Oldsmobile, advised dealer representatives to keep out of social entanglements with employees, put all new people on a 60 day trial basis, don't cringe at the idea of employing someone without experience in auto sales, make no references to customers' "jalopies," keep the premises clean and slash paperwork to the bone.

Michaels told the session of personnel: "Some of our most successful people were never in the business before. We try to instill a team spirit but not at the expense of too much intramural competition."

Michaels also stressed the importance of a presentable salesman's office for closing sales, fast credit arrangements, information on size of business done by individual salesmen and competent supervision of their time and "let them correct their own mistakes." He also stressed use of the "all right, what do you think it's worth" stratagem on irreconcilable squabbles on customer bills.

The institute was conceived and conducted by a panel of leading local automotive dealers, Mr. Grabski, James Berry, former president of Metropolitan Buick; Crawford Edmonds, former professor of economics and a retired dealer, and R. Earl Burrows, executive secretary and manager of CADA. NADA director Birkett L. Williams served as instructor for one class.



**"I MADE
\$14,839
LAST YEAR..."**

**SERVICING
RADIATORS!"**

—Rex Ryan, Bloomfield, Iowa

INVESTIGATE THE HUGE PROFIT POTENTIAL



Rex did all his own work, operating in a former coal house at his home. With only 4,117 cars and trucks in his county! He says: "Last year, income from labor was \$10,790, material sales were \$4,049. The first 3 months after installing Inland equipment, my business paid two-thirds of the cost!"

TREMENDOUS OPPORTUNITIES! Town Auto Co., Allentown, Pa., made over \$13,000 in 1 year! A Rapid City, So. Dak. shop made \$2,072 in 1 month!

Few automotive services offer such a potential for new and expanded business. Of the 60-million vehicles in the U.S., over 20-million require radiator service yearly. Inland-developed equipment allows you to use highly profitable production methods. And Inland offers the only complete package—equipment, training, merchandising.

FREE TRAINING SCHOOL

Practical factory school trains you or your man quickly. Cleaning, repairing, recoring, pricing, merchandising—everything! Hundreds of graduates now expert radiator repairmen. FREE to Inland customers!

"Training was thorough" says L. J. Messer Co., Lincoln, Nebr. "Excellent training!" says R. E. Barber, Inc., Holland, Mich.

MAIL TODAY!

New free 48-page "Blueprint for Profit" gives you experiences of many of the thousands all over the nation making an EXTRA \$8,000 to \$15,000 a year, details and prices of required equipment, Inland's "Pay-For-Itself" payment plan. Invest a minute to mail the coupon—the rewards can be amazing!

INLAND Mfg. Co., 1108 Jackson St., Dept. MA-4, Omaha 2, Nebr.
World's Largest Manufacturer of Radiator Servicing Equipment
"SOLD EXCLUSIVELY BY MAIL!"

**INLAND MFG. CO., Dept. MA-4
1108 Jackson St., Omaha 2, Nebr.**

Please send new free booklet "Blueprint for Profit"

FIRM _____ PLEASE PRINT _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

BY _____ TITLE _____

If Dealer, make of car sold _____
Are you now operating a radiator shop ☐ Yes ☐ No

Another **SHERWIN-WILLIAMS** First
in Automotive Refinishing

**OPEX
"OK" TINT-PAK**
with the
COLOR-by-COLOR
TINTING GUIDE

- All the tinting colors you need in one, handy carton
- Simplifies blending spot refinishing with weathered finishes
- Guide tells **WHAT** tinting color to use with **EVERY** 1954-55 top-coat color and undercoats

SHERWIN-WILLIAMS
OPEX LACQUER
"OK" TINT-PAK
...with the new
"Color by Color"
TINTING GUIDE
for accurate color matching

SHERWIN-WILLIAMS
COLOR-BY-COLOR
TINTING GUIDE
for 1954 and 55
Automotive Topcoat and Undercoat Colors

SHERWIN-WILLIAMS
OPEX "OK" TINT-PAK
Tinting Colors

Now...easier, more accurate
COLOR MATCHING
on each and every job!

Here's real help, for the first time, straight from the formulating laboratory, on the toughest problem refinishing shops have always had—tinting those spot refinishing jobs to match weathered, faded or "drifted" original factory finishes!

The Sherwin-Williams OPEX "OK" TINT-PAK* gives you, in one, handy, self-storage carton, all the tinting colors you need for the majority of your jobs. And the "OK" Color-by-Color Tinting Guide that comes with it gives you individual technical recommendations from Sherwin-Williams Automotive Laboratories, for the correct tinting of each and every different OPEX Lacquer color for 1954-55 cars!

The "OK" Color-by-Color Tinting Guide tells you:

- **Which Way** you may have to tint each top-coat color (redder, bluer, greener, etc.).
- **What Tinting Color** to use for each purpose with each top-coat color.
- **What Tinting Color** to use with undercoats for each top-coat color, for easiest color matching.

Your shop can't afford to be without this new, time-saving aid to accuracy in color matching! Get it with your order for the "OK" TINT-PAK of 12 pints of OPEX Lacquer Tinting Colors. Only \$18.00, complete, from your S-W Automotive Jobber exclusively. Call him today, or write The Sherwin-Williams Co., Automotive Div., Cleveland 1, Ohio. (In Canada: 2875 Centre Street, Montreal. Export Sales, Newark, N. J.)

*Trademark



SHERWIN-WILLIAMS
AUTOMOTIVE FINISHES

Oil Filled Coils

FOR MODERN 6 & 12-VOLT SYSTEMS

**ALL THESE ECHLIN EXTRAS
AT NO EXTRA COST TO *YOU***

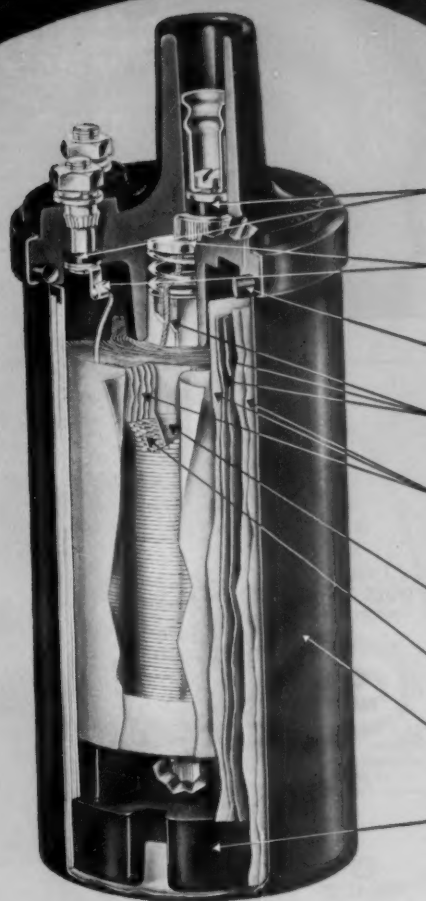
- Oil impregnated and filled under vacuum
- No voids or bubbles to cause insulation failure
- Completely waterproof to assure long life
- Low current draw for longer contact life
- Proper diameter and terminal position for each installation

**YOU CAN PAY MORE, BUT YOU CAN'T
BUY A BETTER COIL AT ANY PRICE!**



A complete line of coils for old and new vehicles •

ECHLIN IGNITION OF CANADA LTD. • 1866 AVENUE ROAD • TORONTO, ONT.



OIL RESISTANT
BUNA N GASKETS

SOLDERED PRIMARY AND
SECONDARY CONNECTION

BUNA N "O" RING SEAL

LAMINATED CORE

INSULATION—OIL
IMPREGNATED UNDER
HEAT AND VACUUM

SECONDARY WINDING

PRIMARY WINDING

SEAMLESS DRAWN
STEEL CASE

PHENOLIC BASE
INSULATOR WITH OIL
CIRCULATING PASSAGES



... All **ECHLIN** coils for modern cars are oil filled

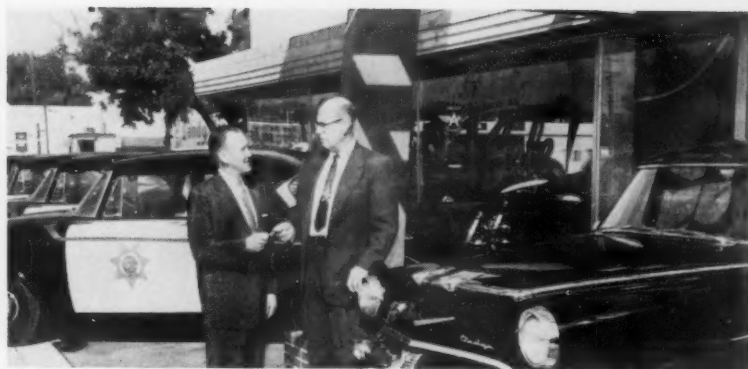
ADVERTISED IN
The Saturday Evening
POST

ECHLIN



Ignition
CONTACTS
COILS • CONDENSERS
& OTHER AUTOMOTIVE
ELECTRICAL PARTS

ECHLIN MANUFACTURING COMPANY • NEW HAVEN 5, CONN. • U.S.A.



HIGHWAY PATROL of the State of California has purchased one hundred new 1956 Dodge patrol cars to cruise the State Highways. John Drew, owner, John Drew Motors (Sacramento, Cal.), through whom delivery was made, is shown handing the keys to the first Dodge of the fleet to Ross McDonald, Deputy Commissioner of the California State Highway Patrol.

Morton E. Bushong

On February 20, Morton E. Bushong, retired Pontiac dealer, died in a Philadelphia hospital after an eight-day illness. He was 74.

Mr. Bushong (pictured in photo) began his career in the automo-



bile business in 1916. In 1932 he set up his own dealership in Upper Darby, Pa. A member of NADA, he was past president of the Delaware County (Pa.) Automobile Dealers Assn.



Win This Original Painting
See Page 40

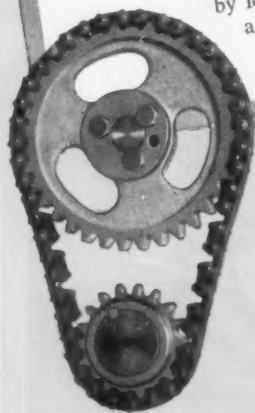
Chilton's MOTOR AGE, APRIL, 1956

Why timing chain
and sprockets
should be replaced
on every engine
overhaul



Use LINK-BELT—
world's finest original
equipment line...

If your customer hopes to maintain the hp he pays for in today's high-compression engines, accurate valve timing is an absolute "must." Explain the performance-killing timing lag that comes from chain and sprocket wear. Then install Link-Belt—the timing chain with anti-whip, anti-back-bend segmental bushings. It's the world's finest original equipment line—standard on many 1956 models. Distributed by leading jobbers, in sizes to fit any engine designed for chain.



LINK-BELT

TIMING CHAIN AND SPROCKETS
LINK-BELT COMPANY,

220 S. Belmont Ave., Indianapolis 6, Ind.
Warehouses in Principal Trading Areas.

14023

**LOOK
WHAT A
SLIGHT
TIMING LAG
DOES TO ENGINE
PERFORMANCE**

**1
FIRE**

**LAG IN PISTON
FIRING:** Carbon,
overheating, plug
fouling, scored cyl-
inders, fuel waste.



**2
EXHAUST**

**LAG IN EXHAUST
VALVE OPENING:**
Burning of exhaust
valves, loss of com-
pression.



**3
INTAKE**

**LAG IN INTAKE
OPENING:** Low
fuel charge,
power loss,
vacuum that
pulls oil past
rings.



**4
COMPRESSION**

**LAG IN INTAKE
CLOSING:** Fuel
and pressure
backfire through
carburetor, dam-
age to pistons
and valves.



3

NEW MONEY-MAKING DEPARTMENTS FOR GARAGES AND SERVICE STATIONS

Cash in on Front-End Business with these
popular Moog "Profit-Packages"

1

Average installation
('51 Chevrolet), including
parts and labor, \$8.50.
Total potential gross on
Moog Tie Rod End
Assortment is over
\$60.00.



MOOG TIE ROD END ASSORTMENT #1

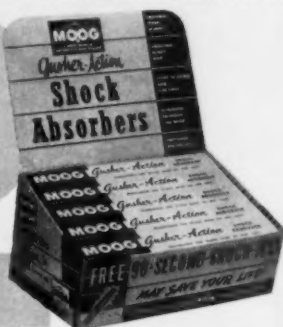
Here's everything you need to sell and install Moog Tie Rod Ends with amazing friction-fighting *Gusher-Bearings*.

You get: 6 pairs of fast-moving Tie Rod Ends packed in display carton. Toe-In Gauge worth \$10. Wall Chart, Catalog, and Service Information.

DEALER'S NET PRICE, \$25.95

2

Garage makes
45% mark-up plus
labor profit!



MOOG SHOCK ABSORBER ASSORTMENT SK-500

This will come as quite a *SHOCK* to you is the title of a booklet, available from your Moog Jobber or by writing us, explaining the Moog Plan for opening a Shock Absorber Department using this assortment.

It includes: 5 pairs of Moog *Gusher-Action* Shocks, giving 85% coverage. 2 Herbrand "Van-Chrome" wrenches and heavy-duty screwdriver (\$5.62 value). Wall chart and merchandising materials featuring "90-Second Bounce Test."

DEALER'S NET PRICE, \$46.00

3

Garage makes \$8.10
profit on Spacers plus
\$7 per pair on labor.
Total profit, \$50.10



MOOG COIL SPRING SPACER ASSORTMENT #3

Correct front end sag of 2 inches or less with this new aluminum spacer. Designed to fit the A frame recess perfectly. Matches original and replacement coil ends without squeak or danger of slipping. A fast, profitable installation.

Moog assortment includes 6 kits (2 Spacers per kit) packed in display carton. Gives 90% coverage.

DEALER'S NET PRICE, \$9.90

USE THIS HANDY COUPON to order these profit-building assortments. Fill it out and mail to your Moog Jobber. Or mail it to Moog Industries, Inc., 6650 Easton, St. Louis 14, Mo. Order will be filled by your nearest Moog Jobber.



MOOG INDUSTRIES, INC., ST. LOUIS 14, MISSOURI
GHQ for Chassis and Suspension Parts

Gentlemen: _____ DATE _____

Please rush to us the following Moog assortments.

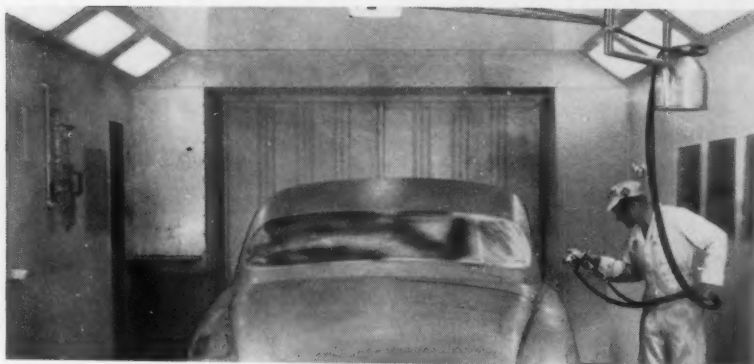
QUANTITY	ITEM	PRICE	TOTAL
.....	Moog Tie Rod End Ass't No. 1.....	\$25.95.....	.....
.....	Moog Shock Ass't SK-500.....	46.00.....	.....
.....	Moog Spacer Ass't No. 3.....	9.90.....	.....

COMPANY.....

ADDRESS.....

CITY..... STATE.....

ORDERED BY..... TITLE.....



California Shop's Paint Spray System

The owner of a metal and paint shop in Woodland, California, has come up with his own type of spray equipment, which he reports, features an overhead arm that can revolve in a 360 degree arc. This overhead system is illustrated at the top of the page at left. The elongated arm serves as a carrier for the paint tank and air hose. It also cuts down considerably on the required length of hose to operate the spray gun from any side of the car being painted.

C. Martindale is the shop's owner and he reports that he has had considerable success in "farming out" prototypes of this equipment to other metal and paint shops in the Sacramento and Woodland area.

His own shop—the Martindale Metal & Paint Shop at 104 Tennessee Street in Woodland—has two combination spray booths and gas ovens. One booth is for cars, the other for large trucks.

High Average

Martindale reports that his shop averages around 50 or more paint jobs per month in addition to the paint work done as a result of patch-work-type body repairs and the two-toning of new cars.

He also points out that the Martindale Overhead Spray Equipment is easily cleaned and that because of its overhead suspension does not allow hoses to drag in the dust which would increase the danger factor of dust and dirt getting on the cars or trucks being painted.

The spray system is available with a hot paint or a cold paint tank. The hot paint tank unit consists of a three-wall construction, six-quart spun aluminum pressure paint heater so arranged as to be heated outside the spray booth. Thoroughly insulated, Martindale says the paint will retain its heat from one to two hours.

There is a safety switch connection with this unit also. This switch makes it impossible to have the current on in the paint tank during the spraying operation.

Lunch Hour: The daily hour with more than 60 minutes.

THE FLEXON 6 FOR '56



Here are the six Flexon thermostat models that will service 91% of all cars on the road today. This means stocking requirements and inventory control are simplified . . . lower handling costs for you.

The Flexon display carton contains a balanced stock of these 6 models that will move. Let your Flexonics Jobber show you the road to bigger profits with the Flexon 6 for '56.

T-34

FLEXON[®]
QUALITY
proved in service and
backed by over 54 years
manufacturing
experience

Flexonics Corporation
AUTOMOTIVE
DIVISION

1398 S. THIRD AVENUE, MAYWOOD, ILLINOIS

FORMERLY CHICAGO METAL HOSE CORPORATION

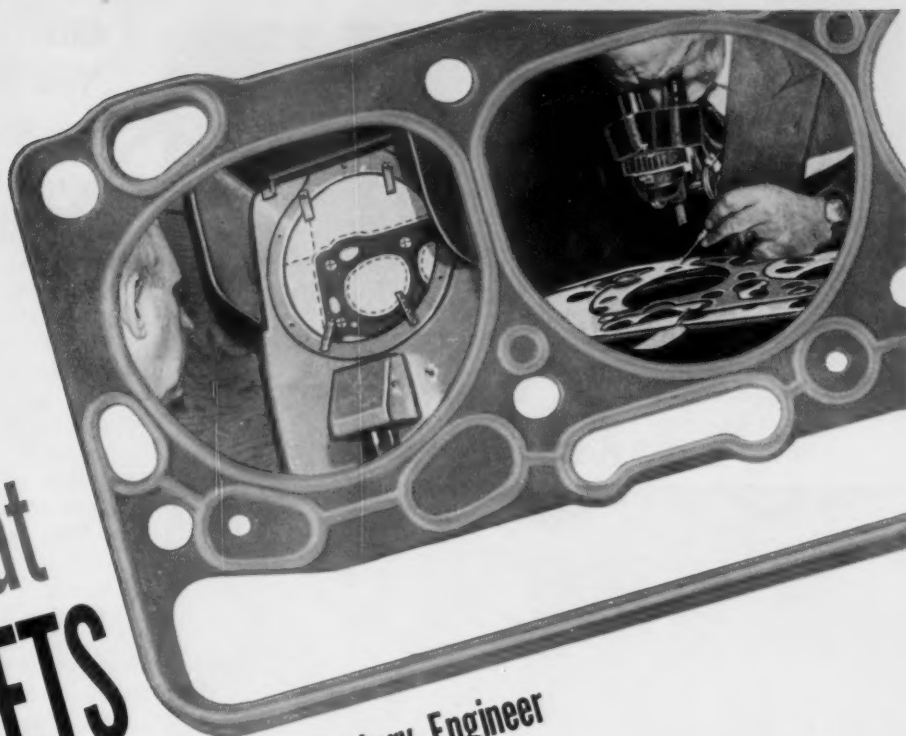
Manufacturers of thermostats and flexible metal tubing.
Plants at Maywood, Elgin, Rock Falls and Savanna, Ill. and Memphis, Tenn.
In Canada: Flexonics Corporation of Canada, Ltd., Brampton, Ontario



LOOK at GASKETS

with the discrimination of a Car Factory Engineer

and you'll buy



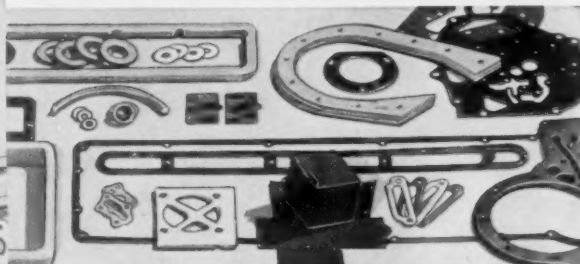
Popular assortments like this put the gaskets you need most, right at your fingertips.



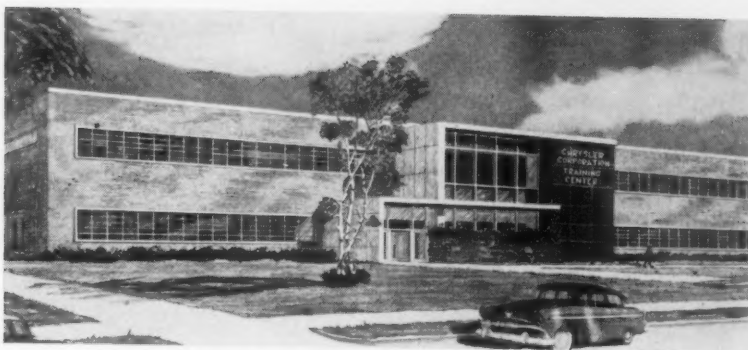
Engineered packaging protects gaskets against humidity and rough handling... helps you identify type of gasket in a jiffy—look for the Fel-Pro Dots!

You can't beat Fel-Pro's well-rounded service—from fibers to rubber, from metallic to new shrink resistant Felcoid gaskets... you name it, Fel-Pro's got it!

1317



On almost every car, there's a Fel-Pro Gasket doing a vital sealing job!



Chrysler Building New Training Center

Chrysler Corporation will soon complete construction of a modern training center for dealer and company service personnel, it was announced by C. L. Jacobson, vice president in charge of Sales for the Corporation.

The new training center (architects view at left) will be housed in a two-story building in Centerline, Michigan, and will be the first of a series of training centers spanning the country. Completion of the unit is expected by June 1, 1956.

"The increasing number of our cars and trucks in use and our desire to assure owners of these vehicles that they will continue to have the finest service talent available make it imperative that we expand our resources for training dealer and field service personnel," Jacobson said.

He pointed out that the corporation's training program has grown tremendously during the postwar period. The number of service technicians trained at factory schools and at dealership classes supervised by the factory has totaled nearly 250,000 since the end of the war.

In addition to classroom studies, an important part of the training plan has been the "Master Tech" program which provides continuous specialized training at dealerships by means of instructional aids furnished by the factory. It is not unusual to have as many as 60,000 mechanics enrolled in the "Master Tech" program at one time.

The new building in Centerline will have a floor area of 84,500 square feet and will be completely air conditioned. It will house the combined activities of the corporation's executive service staff and the Chrysler Corporation Conference of Sales Training. The Chrysler Conference prepares young men for managerial positions in dealerships.

Seven Classrooms

The ground floor of the structure
(Continued on page 188)



Picture of a man making \$75 in one day...in one stall!

George Wilson, who operates his own shop in Washington, Pa., has built a reputation for doing quality work at fair prices.

When he gets a prospect whose car is in good condition except for the engine George sells the owner on the idea of exchanging his old engine for a guaranteed, remanufactured engine.

George quotes him the price. The owner fills out a credit card and George phones the information to his jobber. He invests nothing, takes no chances, wastes no time because the loan is strictly between the finance company and

the car owner.

The engine remanufacturer guarantees his engine against defects because he uses the same high quality parts like *Johnson Bearings* for mains, rods and cams that were used *originally* by the new car maker.

There's a jobber near you who sells exchange engines. Call him and learn how to make \$70 to \$125 per day selling exchange engines. Call him also when you need bearings. Johnson jobbers stock complete sets for most makes of cars and trucks. Johnson Bronze Company, 455 South Mill Street, New Castle, Pa.



Johnson Bearings



Big Number

IN THE
NEW
HIGH-VOLUME
FIELD!



**Oldsmobile's
Lowest-Priced
Rocket Engine Car
Sets a
Record-Smashing
Sales Pace for
Olds Dealers**

*Standard on Series Ninety-Eight; optional
at extra cost on all other series.

It's going over bigger every day!
The "88"—Oldsmobile's big-volume leader—has set up Olds dealers solidly in the new big-volume field!

When it's price people want, Olds dealers have it—a model that sells for less than many so-called "lowest-price" models. When it comes to performance—there's still nothing quite like the Rocket! As for style, prestige, value—the big-volume buyers everywhere are naming the "88"!

Months ago, Oldsmobile foresaw the trend, prepared for it, stepped up "88" production facilities to meet the new demand. And Olds dealers again got what they wanted. Just as they have always gotten what sells best. Like the new Rocket Engine! Like new Jetaway Hydra-Matic!*

No wonder they're the envy of the industry—because, more than ever, the going's great with the low-price, high-value "88"!

A QUALITY PRODUCT SOLD BY OLDSMOBILE QUALITY DEALERS!

OLDSMOBILE

DIVISION OF GENERAL MOTORS CORPORATION • LANSING, MICHIGAN

FREE FLASHLIGHT

(TO BE DELIVERED BY YOUR PYRO JOBBER)

And PYRO is backing up the entire industry with the most practical, most profitable promotion in history . . . the PYRO SUMMER SAFETY SERVICE PROGRAM

NATIONAL ADVERTISING...

Check these 8 car tips for your Summer trips

Has another driving job at your service for your car's performance and dependability. No time you start a trip for safety and driving comfort, get this 8 Point Summer Safety Service.

Check...

1. Tire pressure and wear.
2. Oil and filter.
3. Battery and brake fluid.
4. Lights and windshield wipers.
5. Cooling system—radiator and flush.
6. Thermostat, pump, hoses.
7. Belts and fan belt.
8. Radiator with clean water and add anti-freeze.

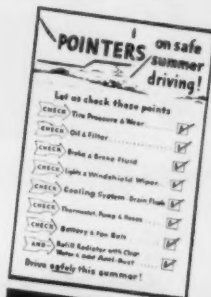
A service message from:
OLIN MATHIESON
CHEMICAL CORPORATION
American Products Representative
Baltimore 3, Maryland

in magazines that concentrate on men is warning motorists that old anti-freeze can cause loss of power and serious engine damage—that they should have their radiators drained, cleaned, inspected and refilled with clean water and ANTI-RUST. *There's no brand sell! No chest thumping. These ads are published as a service to you and your customers.*

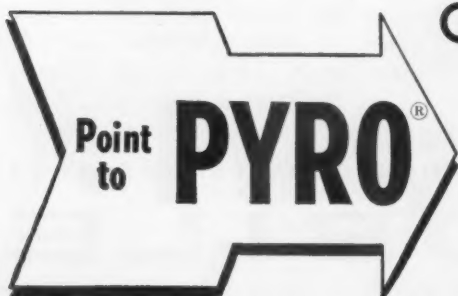


YOUR FREE TIE-IN KIT

features two of the most popular posters ever produced. The 8 point safety check poster that reminds your customers of other high profit accessories and services, and a special WARNING poster that's sure to get motorists to drain their anti-freeze. Again, no brand sell! Just pure service for you and your customers.



Getting more Anti-Freeze out



in the Spring will mean more anti-freeze sales in the Fall. Now, Olin Mathieson has solved the puzzle of anti-freeze names by presenting one brand name for both types of anti-freeze—PYRO. Which ever type a customer wants—permanent or economy—all he has to do is point to PYRO!

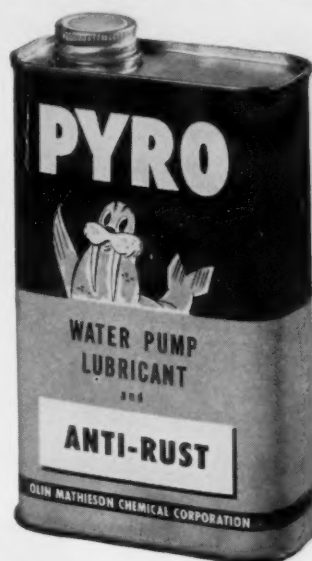
This Spring you can get this **FREE** chromium-plated 2-cell flashlight—complete with batteries—with each case of

PYRO ANTI-RUST

This 1000 foot beam beauty comes complete with batteries, three position switch—"off," "flash," "steady." Removable end cap contains spare bulb holder and folding ring hanger. Built-in shock absorber protects "Fixt-focus" beam. Fits snugly into hip pocket. Chromium-plated brass barrel is ideal for rugged use.

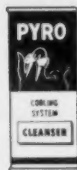
It's a must for Summer engine protection.

PYRO ANTI-RUST guards every part of your customer's cooling system against rust and corrosion . . . keeps the vital water pump at peak efficiency for hot Summer driving! Every can of PYRO ANTI-RUST means \$.40 profit. Every case means a **FREE* FLASHLIGHT!**



And don't neglect these other members of the PYRO Summer Safety Service team!

PYRO CLEANSER



If the system is dirty, rusty or has hard water scale, PYRO Cleanser loosens and removes these harmful deposits . . . gets the system clean and fresh—ready for Summer driving! Every can of PYRO Cooling System CLEANSER means \$.50 profit!

PYRO STOP LEAK



Check carefully all rubber and metal parts, including hose and connections, fan belt, gaskets, heater and radiator cap. You can't see the tiny, dangerous pinhole leaks—but PYRO Stop Leak gets to them and stops them up! Every can of PYRO Cooling System STOP LEAK means \$.30 profit!

Leaving Anti-freeze in a cooling system during the Summer may cause serious corrosion and damage. In every engine, used anti-freeze will cause loss of power and overheating. Drain it out! Then refill with water and Anti-Rust. Remember, ANTI-RUST is just as important for Summer driving as ANTI-FREEZE is for Winter driving!

**Take advantage of this Limited Time Offer NOW! Only 12 cans to a case.*

OLIN MATHIESON CHEMICAL CORPORATION
Automotive Products Department • Baltimore 3, Maryland

BOSCH

GERMANY



WORLD-FAMOUS MANUFACTURERS
OF HIGH-QUALITY PRECISION PRODUCTS



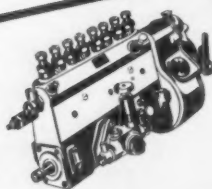
SPARK PLUGS



VOLTAGE REGULATORS



IGNITION COILS



GASOLINE AND
DIESEL INJECTION

and other automotive, electrical and
fuel-injection products

ROBERT BOSCH CORPORATION

268 Fourth Avenue, New York 10, N.Y.

Robert Bosch (Canada) Ltd., 5767 Monkland Ave., Montreal 28, Que.

Sales and Service Representatives for

ROBERT BOSCH GmbH, Stuttgart, Germany

Performance

IS THE WORD FOR DODGE!



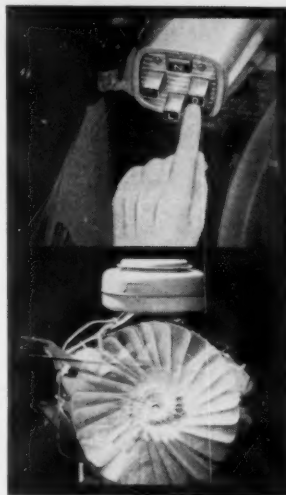
Talk to ten different people, and you may get ten different slants on what a car means to them.

But when you get down to cases, there's one feature that can not only sell a car, but *keep it sold*. It's what happens when you turn the key, push a button and GO. It's performance.

Here's why we say *performance* is the word for Dodge. Out on the Bonneville Salt Flats, where comfort and styling cut no ice with the AAA, it was the surging break-away power of the mighty Dodge aircraft-type V-8 engine and the rugged endurance inherent in Dodge engineering that set 306 AAA records—sweeping the record book clean!

In 14 days and nights, this regular stock Dodge covered 31,224 miles for an all-time endurance record—averaging 92.86 mph. This included every AAA American and International performance and endurance record for American closed cars up to 31,224 miles, plus 27 World's Unlimited Records, open to all foreign, sports and racing cars!

Talk about style, and Dodge has it—dramatic flair-fashioned styling that turns heads everywhere. Smooth, comfortable riding too. Push-button driving is another Dodge "first." But, when the chips are down, *performance* is the word for Dodge . . . as for no other car.



PUSH-BUTTON
DRIVING

NEW
BREAK-AWAY
POWER

See and Drive the NEW '56

DODGE



VALUE LEADER OF THE FORWARD LOOK



Convince car owners to

drain last winter's anti-freeze



SOUND ADVICE TO CUSTOMERS MEANS MORE BUSINESS FOR YOU

Urge your customers to drain anti-freeze in the spring and replace it with water containing rust inhibitor. By giving all the facts, you can show how a minor investment each year prevents costly repairs later on.

Rust inhibitors last all winter ... but not forever

There are many reasons why anti-freeze rust inhibitors are used up during a season's driving. For example, even a small amount of exhaust gas leaking into the cooling system can reduce the effective life of a good rust inhibitor.

Water is a better summer coolant

All-winter anti-freeze does not help the engine run cooler. Since inhibitors break down and rust forms more rapidly during summer driving, the worn-out anti-freeze solution must

be discarded and replaced with fresh water containing a special summer rust inhibitor.

Automotive experts all agree

The men who know the technical side of anti-freeze and cooling systems are solidly together on this point. Their findings in the laboratory and on the road prove that draining anti-freeze in the spring is the best rule for all car-owners to follow. And, authorities point out that water is more effective for summer cooling than anti-freeze solution.

The feeling of experts on this important matter is summed up well in this statement from the American Automobile Association — "Changing cooling solutions periodically makes the same good sense as changing motor oil."

For further information, write to

CARBIDE AND CARBON CHEMICALS COMPANY

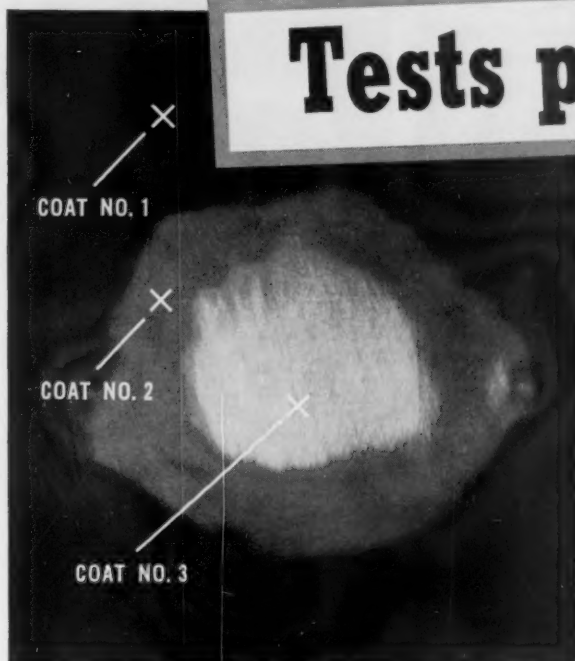
A Division of Union Carbide and Carbon Corporation  30 East 42nd St., New York 17, N. Y.



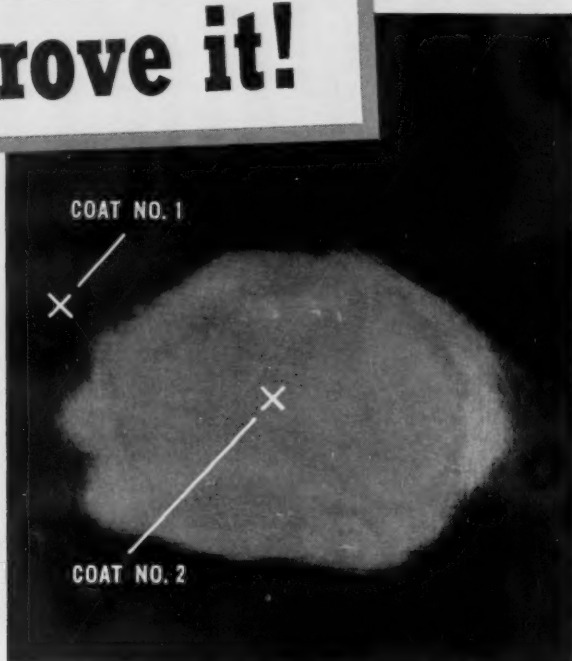
World's fastest-cutting sandpaper... "WETORDRY"

REG. U. S. PAT. OFF.

Tests prove it!



"WETORDRY" Tri-M-ite Paper, Grit 320A, cut through first color coat in 40 strokes—through second coat in 45 more, cut aggressively for 200 strokes before noticeably dulling.



WATERPROOF sandpaper "X", Grit 320A, took 60 strokes to cut through first color coat—quit cutting 18 strokes later, never reached third coat.

No matter how it's used



HAND
SANDING



BLOCK OR PAD
SANDING



MACHINE
SANDING



DISC
SANDING

In the test shown above, two identical test panels were sanded—one with "WETORDRY" Tri-M-ite Paper, the other with waterproof sandpaper "X." Results were conclusive: "WETORDRY" cut aggressively 122 strokes longer than the other sandpaper and cut 30% faster!

Wet sanding with 3M's "WETORDRY" is fast and easy—"WETORDRY" becomes pliable when wet, has a chamois-like feel that makes it conform better. The diamond-hard silicon carbide particles cut quick and stay sharp

long after ordinary sandpapers have worn out.

No matter how you use it... hand sanding, block or pad sanding, machine sanding, disc sanding... "WETORDRY" Tri-M-ite Paper is designed to save you time, money and work on every job—spot and over-all. Order today from your regular 3M supplier. Remember, it's the world's fastest-cutting, sharpest sandpaper.



3M Automotive Products

PRODUCT OF
3M
RESEARCH



The term "Wetordry" and the plaid design are registered trademarks of Minnesota Mining and Manufacturing Company, St. Paul 6, Minnesota. Export Sales Office: 99 Park Avenue, New York 16, N.Y. In Canada: P.O. Box 757, London, Ontario.

The Chevrolet Dealer Planning Committee

20 years of teamwork!

*That's a thumbnail history of Chevrolet's
Dealer Planning Committee—the oldest, most
successful group of its kind in the industry!*

The fact that *all* Chevrolet dealers are represented by the committee—each having a voice in discussion of problems affecting his business—is a major reason for the committee's unparalleled success. Each year, dealers vote to elect Zone Committees which in turn elect Regional Committees. From these, a National Committee is elected and meets in Detroit for discussion and to formulate resolutions for consideration.

Advertising and merchandising ideas are discussed. New model changes are suggested. Service problems are gone over and service programs devised. Dealer suggestions of all kinds are aired. Result: as many as six hundred or more separate resolutions are passed in a single year!

In the Committee's twenty-year history, a great majority of the suggestions made by dealers have been put into operation to the benefit of dealers, factory and customers alike.

That's *action*—really doing something about dealer problems. And that's *teamwork*—dealer cooperation on an astonishingly large scale. It's no wonder Chevrolet's is the most imitated of any dealer planning committee organization.



YOU'LL PROFIT MOST WITH CHEVROLET—AMERICA'S
FOREMOST AUTOMOTIVE FRANCHISE



CHEVROLET DIVISION OF GENERAL MOTORS, DETROIT 2, MICHIGAN

IN APRIL G-E *All-Weather* HEADLAMPS featured in 3 point "Buy a Pair" Campaign!



"BUY A PAIR" ON TV COMMERCIALS

Commercials on "MEDIC", General Electric's TV Award winner, show how G-E *All-Weather* Headlamps give greater night driving safety, in bad weather and clear weather. April 16 and 23 at 9 PM on NBC-TV Network.



"BUY A PAIR" IN MAGAZINE ADS

12 dramatic ads during April and May, show your customers specific advantages of G-E *All-Weather* Headlamps in 7 top magazines: Look, SatEvePost, Colliers, Popular Science, Popular Mechanics, Farm Journal and Progressive Farmer.



"BUY A PAIR" ON STORE DISPLAYS

Colorful eye catching display material is available from your distributor. Inside and outside streamers, humorous cartoon cards for window or shelf displays will help you sell *pairs* of G-E *All-Weather* Headlamps.

G-E *All-Weather* HEADLAMPS with aim-right Gizmos for quick, accurate aiming

FEATURES TO HELP SELL PAIRS!

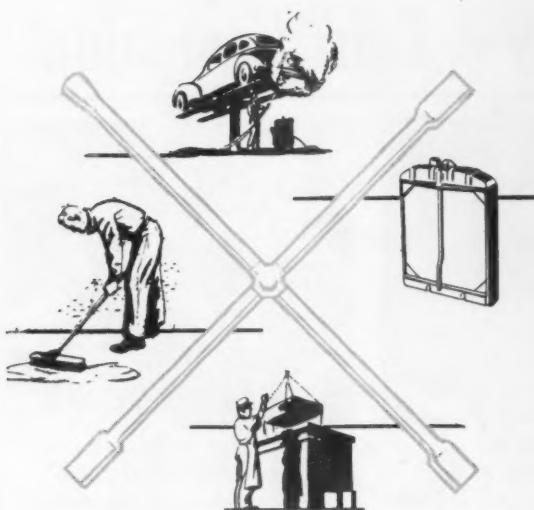


- 1** Aim-right Gizmos are glass pads molded in G-E *All-Weather* Headlamp lenses to help aim headlamps in aiming machines quickly and easily. Gizmos are smooth—they hug the lens surface . . . are not vulnerable to breaking, chipping or cracking.
- 2** G-E *All-Weather* Headlamps with Aim-right Gizmos can be aimed on *any* aiming machine... standard G-E *All-Weather* Headlamps can be aimed by *all* aiming devices *except* one, at this time.
- 3** The G-E shield covers the *lower beam* filament *only*. It cuts off uncontrolled upward light which, in ordinary headlamps, reflects back in the motorists' eyes during rain, snow, fog or sleet. The *upper beam* filament is purposely *unshielded* to provide maximum light for seeing hills, curves and dips in *clear* weather.
- 4** The redesigned lens-reflector combination directs light from lower beam up to 80 feet further along the right side of the road. Passing is easier.
- 5** Lead-in wires are preformed—natural "spring action" is eliminated to keep filaments from being pulled out of focus. Miniature Lamp Dept., General Electric Co., Nela Park, Cleveland 12, Ohio.

DISPLAY AND SELL THEM IN PAIRS

GENERAL  ELECTRIC

OAKITE PENETRANT®



... 4 way cleaner

Like the 4-way lug wrench—so popular because this one tool fits all the usual size lugs—Oakite Penetrant has four-in-one versatility when it comes to cleaning in garages and repair shops.

A single drum of Oakite Penetrant gives you the all-round cleaning ability ordinarily requiring four separate drums. Here's what it does.

- 1 **CHASSIS AND MOTORS:** wets, penetrates, breaks up heavy, greasy road sludge.
- 2 **COOLING SYSTEMS:** floats out muck, grease. Improves engine performance.
- 3 **REPAIR PARTS:** removes dirt and grease. Speeds inspection and repair.
- 4 **FLOORS, PITS, LIFT AREAS:** loosens even toughest grease deposits. Makes for safe walking.

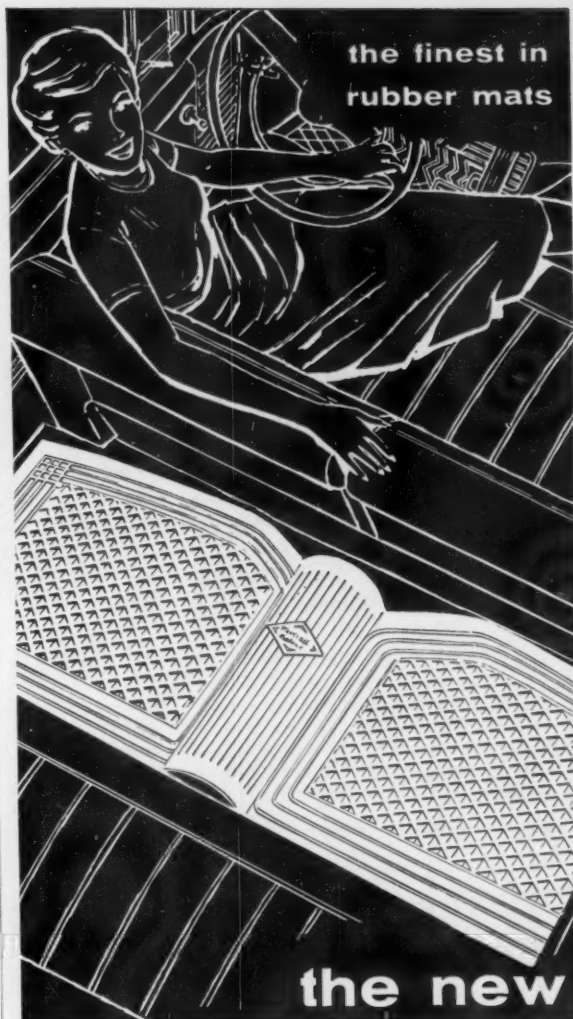
And just as the 4-way wrench does a better job than the old-style single type—because an “assist” is built into its design—Oakite Penetrant does a superior job whether used on chassis, cooling system, parts or floors. The big assist, with Oakite Penetrant, is the scientific blending of the best-acting ingredients.

To say nothing of the assist your local Oakite man will be glad to give you on any of your cleaning problems. Call him, or write for booklet on automotive cleaning. Oakite Products, Inc., 40B Rector St., New York 6, N. Y.

Export Division
Cable Address: Oakite



Technical Service Representatives in Principal Cities of U. S. and Canada



Rubbermaid® KOVER-ALL

**FOR ONE PIECE COVERAGE IN
REAR FLOORS OF ALL CARS . . .**

Famous Rubbermaid quality means the finest in rear floor overall mats - original diamond design - engineered to fit all cars - and clear, rich colors in Holiday Red, Blue, Green, Black, Tan and Grey. Colorful box tells the story - attracts and sells on display. You'll sell more-profit more with genuine Rubbermaid KOVER-ALLS. Get them for YOUR customers - now.



THE WOOSTER RUBBER CO. WOOSTER, OHIO

DU PONT PUTS MORE PROFIT IN BRAKE-FLUID SERVICE

*with this one-man-operation
dispenser-bleeder*

Draining, flushing and refilling hydraulic systems averages only 15 minutes with this portable, one-man-operation dispenser-bleeder . . . requires an average of 12 oz. of fluid. Yet you can charge from \$2.95 to \$3.95. And when you refill with genuine Du Pont Heavy Duty Brake Fluid you may save lives. Since even the best brake fluids used today break down in service, America's 60 million cars need to have brake systems drained, flushed and refilled *at least once a year*. Ask your jobber about this profitable way to service them!



• 4-way master cylinder plug



PLUS

Adapter for
1955-56 Chrysler cars



Yours with 2 Du Pont Brake-Fluid deals

Assortment No. 1

2 Gals. No. "7" Heavy Duty Brake Fluid @ \$4.20 ea.	\$8.40
1 Dispenser-Bleeder with all fittings	\$17.95
Total Value	\$26.35
SPECIAL DEALER PRICE	\$16.30

Assortment No. 2

1 5-Gal. No. "7" Heavy Duty Brake Fluid	\$20.00
1 Dispenser-Bleeder unit with all fittings	\$17.95
Total Value	\$37.95
SPECIAL DEALER PRICE	\$27.90

Chrysler adapter alone

—a \$3.85 value—for \$1.95, with purchase of one case Du Pont Brake Fluid.



DU PONT No. "7" PRODUCTS

From Chemical Research . . . for Easier Car Care



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

1st choice... OF OWNERS AND DRIVERS!



Stewart-Warner ELECTRIC TACHOMETERS

Accurate! Positive electric drive assures accurate speed indications. Helps bring greater safety and economy.

Dependable! Manufactured to highest standards of quality. Designed and engineered for long, reliable service. Vibration-proof . . . no flexible shafts, no oscillators to break or need repairs!

Easy to Install! No special tools or changes in vehicle's electrical system required. Will not affect engine spark or timing at any speed.

Easy to Read! Large 3" diameter, illuminated face dial. Steady pointer has full 270° travel for quick reading. Adjustable red markers for holding to "economy range."

Exclusive! The only electric tachometer with an odometer! Records total engine revolutions to permit scheduling of maintenance and overhaul periods on basis of engine use. Also gives accurate measure of engine life.

Order from your Stewart-Warner Jobber or write:

STEWART-WARNER

Instrument Division
Dept. FF-46, 1840 Diversey Parkway, Chicago 14, Illinois

Hot Spray Undercoater Saves Material...Speeds Work



. . . and here's how: the Spee-Flo Hot Spray Undercoater heats and thins the material for smoother jobs, less waste, fewer spraying passes.

Spee-Flo gives you: denser, less porous film . . . more protection . . . a cleaner and more profitable underbody coating job. Reduced overspray assures a cleaner shop. Undercoating costs are cut with more jobs per drum.

Call your automotive jobber or write the Spee-Flo Company, Dept. MA-5, 720 Polk, Houston, Texas, today for a "prove-it-to-me" demonstration of the Spee-Flo Powermastic 300 Undercoater.

Save that WINDSHIELD



Remove Surface Scratches
the New "SOMACA" way . . .

No. SM-570-PSP PORTABLE SCRATCH POLISHER

Designed to meet the demand for a low-priced, light-weight portable tool capable of removing light surface scratches from automobile windshields . . . also can be used to polish out rubs, fine lines, stains, and discolorations on mirrors or glass of any kind.

Weights only 7 lbs. . . Perfect balance and properly placed handles make it possible to work with the windshield right in the car, thus lowering the labor cost and many times the cost of replacing an expensive curved windshield.

No. SM-570-PSP complete as illustrated with 1 lb. can of polishing powder.

Only \$59⁵⁰

SOMMER & MACA Glass Machinery Co.

Automotive Department

3624 SOUTH OAKLEY AVENUE CHICAGO 9, ILLINOIS

To Protect Customers...

CHECK THE BELTS



**Customers appreciate the service...and
you make a good profit on replacements**

As you well know, in today's automobile the V-belt has a bigger job to do than ever before. V-belts are now driving not only fan, water pump and generator but power steering and even air conditioning, too.

A V-belt that fails on the road could mean serious trouble for your customer.

That's why it is good practice to check the belts on every car that comes in. You really protect your customers... and make the good profit that replacement of multiple belts gives you.

Customers Know the Gates name

When you replace belts, there is one sure way to do the job in the least time with the least trouble. Use Gates Vulco V-Belts. There is a Gates V-Belt precisely engineered for each make and model car. They fit right—and there are no finer belts made in the world.

Furthermore, when you tell your customer you have installed a Gates Belt, you'll find *he* knows the name... knows that it stands for the highest quality. That's added proof to him that he has chosen the right shop, the right mechanic.

Phone Your Gates Jobber

He will supply a rack that holds belts for all popular models. And, you can always get others quickly from the jobber's complete stock. Start today checking belts... for customer protection... and your own profit.

The Gates Rubber Co., Denver, Colo.
World's Largest Maker of V-Belts.



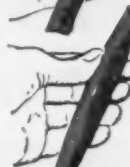
**Always turn
Belt over**

The belt may look all right on top but it's the *underside* that tells the story. Belts that have any of the following signs of wear should be replaced.



CRACKED:

Cracks on *underside* are dangerous. Belt may snap suddenly.



GREASY:

Note the grease-softened undercore and slick sidewalls. Aside from danger of slippage, such belts go to pieces rapidly.



GLAZED:

Slick, glazed sidewalls may cause belt to slip badly. Result: low battery, and over-heating.



PEELING:

Sections of undercore (underside) often peel and break off. Belt runs rough—may fail.



SPLIT:

Signs of "fraying" may indicate split in sidewall. Split belts don't ride pulleys properly—may cause sudden trouble.



TPA-75

Gates Vulco V-Belts



THEY SHOP IN FARM JOURNAL



THEY SHOP IN TOWN JOURNAL





CHAMPION

sells the whole Countryside Market... Town and Farm

Champion Spark Plug Company puts vital selling power behind its dealers with full-page advertisements in the Countryside Unit, the winning combination of Farm Journal and Town Journal. Why does Champion use the Countryside Unit?

Because every month over 5 million copies of this selling package reach and influence the biggest single market for automotive parts and services in America—Countryside America.

More than 22 million families live beyond the metropolitan centers in the rich countryside market. They own and operate almost half of all the automobiles in the U.S.A., 65% of the trucks, and 92% of the tractors. In business to supply, service and maintain this vast army of machines are 73% of the nation's car and truck dealers, almost half of the independent repair shops and 58% of the automotive jobbers—all in Countryside America.

In this important market, the Countryside Unit is unequaled by any other national publication in penetration and merchandising power. That's why advertisers find it a gilt-edged investment. Jobbers, local dealers and garage owners like it, too, because they count on it to presell their best customers and prospects. After all, the Countryside Unit saturates town and rural areas like a local newspaper, giving them the local coverage they need.

Here's what some independent garage owners say:

- "I'm not an expert on advertising, but when you get support from both Farm Journal and Town Journal, you can't miss." *Delmer S. Yerdon, President, and Gordon C. Cushman, Treasurer, Cushman Co., Inc., Schuyler Lake, N.Y.*
- "For my part, I prefer to handle lines that are advertised in the Countryside Unit. They're a lot easier to move." *Herb Kodelman, Riga, Mich.*

People like to read advertising in magazines

CU

Farm Journal

The magazine farm families depend on

Town Journal

The magazine town families depend on

Moraine-400 Bearing

A special aluminum alloy and cladding process developed by General Motors and Moraine Research gives the Moraine-400 its extreme toughness—makes it the toughest automotive engine bearing ever known.



M-100 Bearing

Exclusive Moraine matrix between babbitt and steel provides a more secure metallurgical bond plus all the advantages of thin babbitt overlay, without limiting embedability. M-100 bearings have excellent fatigue resistance and longer life expectancy.



"COMPLETE LINE OF

Another General Motors Value



Moraine BI-METAL Bearing

Conventional steel-backed babbitt type. Precision bearings built to original equipment specifications give longer, more dependable service in moderately loaded engines.



Moraine Engine Bearings

are attractively packaged, easily identified on your shelves. Order your new United Motors catalog containing information on the complete Moraine bearing line.



MORaine ENGINE BEARINGS

Puts You in Line for the Biggest Pre-Sold Market''

More cars, trucks and buses come off assembly lines equipped with Moraine engine bearings than bearings of any other make. Moraine engine bearings have the fit and the durability you expect when you install the service bearings designed and produced as replacements for *original equipment* applications.

So, stick to Moraine!

That's easy to do. Service bearings, for every Moraine original equipment application, are available everywhere. You can get them quickly through the United Motors System, or through your General Motors car or truck dealer.



Moraine Products

Division of General Motors, Dayton, Ohio



A GENERAL MOTORS PRODUCT — A UNITED MOTORS LINE
DISTRIBUTED BY WHOLESALERS EVERYWHERE

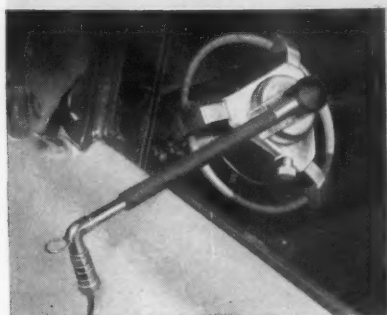
NOW...only John Bean VISUALINER

John Bean engineers have now combined Visualiner accuracy with new speed and revolutionary adjustability to expand your aligning service to any tread width from 40" to 66" — foreign cars, sports cars, passenger cars and light trucks. And you make these tread width adjustments

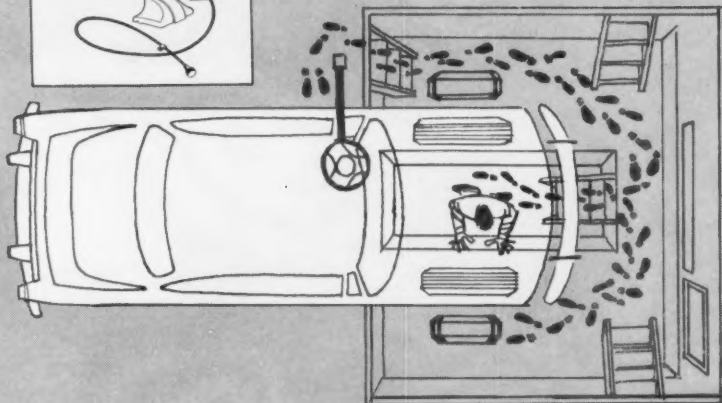
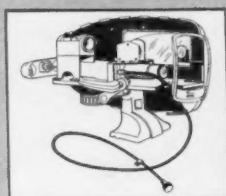
New! Aligning Time is Cut One-Third with new Finger-Tip Remote Controls

- 1 The operator can do the complete job of checking and correcting from one spot.
- 2 Each step in checking and correcting is magnified on a large screen visible from any working position.
- 3 A touch of the remote steering wheel control button turns wheels automatically to any desired position.
- 4 Another remote control permits checking caster, camber, toe-in, and steering geometry without moving from your working position.
- 5 Back and forth steps around the car are eliminated because the operator can do the complete job from one spot.
- 6 Speed and ease of operation are built-in features of the new adjustable Visualiner that enable you to begin aligning any car within seconds.

DO A
COMPLETE
ALIGNMENT
JOB WITHOUT
MOVING FROM
ONE SPOT



Exclusive remote controls save TIME — assure greater accuracy. Look at the steps you save.



JOHN BEAN DIVISION, Lansing 4, Michigan

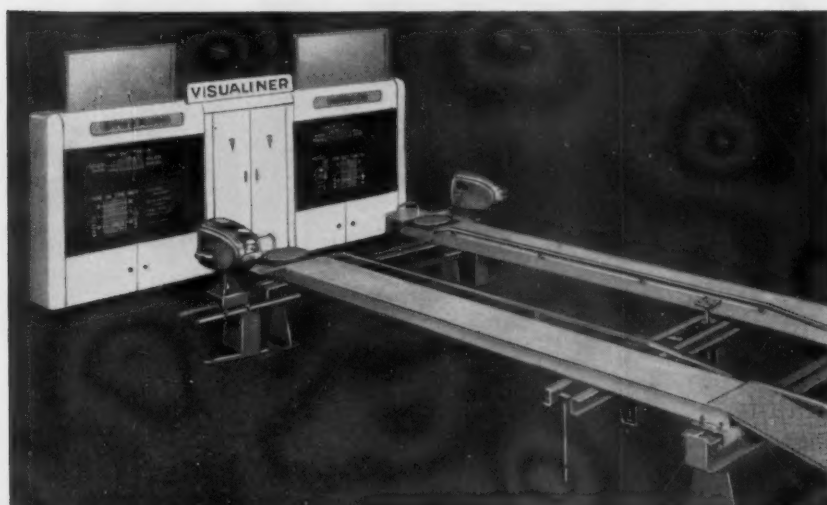
- ☐ Send complete information on the new, 1956 adjustable Visualiner.
- ☐ Tell us how we can modernize present equipment with the Remote Control and Adjustable Rack Units.

Name _____
Address _____
City _____ Zone _____ State _____

SEND TODAY for complete facts on such new, revolutionary features as the remote steering wheel turner, remote chart control, exclusive Visualiner long-life lamps, complete tread width adaptability and easy rear wheel alignment.

gives you these exclusive features

in seconds with Visualiner's exclusive roller and ball bearing mounted heads and runways. Check the many new, outstanding features that are exclusive with John Bean and see why no other aligning equipment offers all the advantages you'll find in the new John Bean adjustable Visualiner.



TRUCKS



PASSENGER CARS



SPORTS CARS

SERVICE ANY CAR

... Foreign car, Sports car, Passenger car

OR LIGHT TRUCK
with the NEW

John BEAN
ADJUSTABLE
VISUALINER

New! Adjustable Rack Enables you to Widen the Scope and Volume of your Aligning Service

- 1** Easy tread width adjustments from 40" to 66".
- 2** Runways and heads are easily and quickly moved on ball and roller bearings.
- 3** Now you can easily position the car — parallel to the Visualiner light beams — after it is on the rack.
- 4** Quick, easy rear wheel alignment check. New, mobile rear wheel jack

assembly, mounted on roller bearings, also permits easy rear wheel runout and wheel base checks.

5 New, exclusive Visualiner long-life projection lamps. Also available for your present Visualiner.

6 All of these new features are available in pit-type or floor-type installations, and in changeover equipment for modernizing any make aligner.



JOHN BEAN
LANSING 4, MICHIGAN

DIVISION OF FOOD MACHINERY
AND CHEMICAL CORPORATION



The PRECISION of the STARS





I need two-fisted sales promotion in my business, and United Motors Service sure fills the bill. The campaigns are complete. But more important to me is the fact that they've got follow-through.

They never stop working for me. My customers know I handle General Motors products—and they're aware of their fine performance records, because these campaigns help me tell them (and keep them told!). Every United Motors Service line I handle has its individually planned campaign, carefully analyzed and designed to do me the most good. All this helps me do a day-by-day selling job that I wouldn't have time for otherwise. Yes sir, the UMS sales promotion campaign backs me up 100 percent—but I've come to expect that—because that's the UMS way of doing business.

Sales promotions??

UMS backs me up with the best!

ALMOST HALF OF AMERICA'S VEHICLES USE THESE GENERAL MOTORS ORIGINAL EQUIPMENT PARTS

Available through independent distributors everywhere



Chassis and engine parts for BUICK, CADILLAC, CHEVROLET, GMC, OLDSMOBILE, PONTIAC • DELCO batteries
HARRISON radiators • MORaine gasoline filters • MORaine engine bearings • DELCO automotive motors
GUIDE lamps • DELCO-REMY starting, lighting, ignition • KLAXON horns • AC gauges, speedometers
DELCO shock absorbers • NEW DEPARTURE ball bearings • HYATT roller bearings • HARRISON thermostats
ROCHESTER lighters • PACKARD cable products • ROCHESTER carburetors • DELCO brake parts and fluid
INLITE brake linings • GM Hydra-Matic units and parts • SAGINAW steering • DELCO electronic parts



TUNE IN | **ON TV**.....Spectacular "Wide Wide World" on NBC Network.
ON RADIO...Lowell Thomas Newscast on the CBS Network.
See local listings for time and station.



Why the "fires up"

News of this revolutionary advance in spark plug design is rapidly sweeping across the nation. Millions of car owners from coast to coast are being told the story of this all-new Auto-Lite Resistor Spark Plug with Power Tip that really "fires up" overhead-valve V-8 engines for top performance

and economy at all speeds. You'll find the information on these two pages well worth a thorough reading right now. For here are the answers to questions your customers will ask when they drive in for advice and service. Be prepared to give them these answers quickly and convincingly.

Why the Power Tip?

63% of all cars built in the last five years have overhead-valve engines. No advancement in spark plug design was made to match this improvement until Auto-Lite developed the new Power Tip which is completely "ignition-engineered" to improve performance in these higher horsepower, higher compression engines.

What does it do?

The projecting ceramic tip . . . the Power Tip . . . extends the spark gap inward toward the center of the combustion chamber. Thus, ignition occurs closer to the heart of the fuel mixture, resulting in positive ignition at all speeds and more even and complete burning of the fuel.

What are the results?

Frequent testing has proved that in many cases the fuel mixture can be made leaner. Obviously, the result is better economy with no sacrifice in power or performance.

How does it improve engine performance?

The limitations of heat range in various types of spark plugs formerly posed a constant problem for the service men. "Hot" plugs were recommended for city driving but frequently caused pre-ignition at higher highway speeds. "Cold" plugs filled the bill for fast highway speeds but often fouled at slower city speeds. Power Tip functions efficiently at *all* engine speeds.



OFFICIAL nation-wide announcement of this revolutionary new Auto-Lite Resistor Spark Plug with Power Tip was made to editors of leading automotive trade publications. They donned white coats to view tests which proved the superiority of Power Tip. Above picture taken in the Auto-Lite engineering laboratories in Toledo, Ohio.



COMPARE these two center electrode alloys and you have positive proof that the Power Tip alloy has what it takes. The Power Tip alloy and a sample alloy used in a conventional spark plug were subjected to four hours' exposure in a 1650°F. lead bromide atmosphere. Note that the conventional electrode (top) is badly pitted and lost 33.05% of its original weight, while the Power Tip electrode is practically unmarked. It lost only 6.45% of its original weight.

AUTO-LITE POWER TIP engines at all speeds!

What about customers?

Its efficiency at all driving speeds does much to overcome customer complaints. By getting hot faster at low speeds, Power Tip resists fouling because better combustion burns deposits away clean. And, at highway speeds, Power Tip checks destructive pre-ignition because the tip gets full benefit of cooling intake gases.

Is it tried and tested?

Auto-Lite has conducted transcontinental tests with some Power Tip equipped cars travelling as many as 28,000 miles. Others were subjected to 24-hours-a-day driving, 7 days a week over open highways and under stop-and-go city driving conditions.

Who did the testing?

An important independent research laboratory installed Auto-Lite Resistor Spark Plugs with Power Tip in their test cars operating in a Southwestern state, and the results again verified all other road tests conducted by Auto-Lite. This firm also conducted exhaustive tests in cars driven under traffic jam conditions to record superior engine performance under these severe conditions.

Is it available now for all cars?

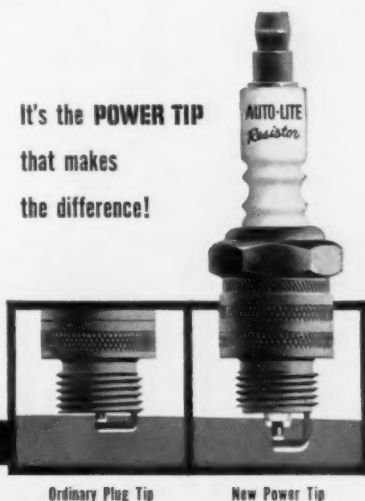
Power Tip fits all these cars with overhead-valve V-8 engines using 14 mm. spark plugs: Buick, Cadillac, Chevrolet, Chrysler, DeSoto, Dodge, Plymouth, Ford, Hudson, Imperial, Lincoln, Mercury, Nash, Oldsmobile, Packard, Pontiac, Studebaker.

Power Tip opens a vast new market to boost your profits in 5 ways!

1. Power Tip is the *first and only* spark plug that works at peak efficiency at all speeds in all overhead-valve V-8 engines using 14 mm. spark plugs. Owners of these cars are immediate prospects.
2. Power Tip is specified as original equipment on many leading makes of our finest cars—enables you to take advantage of this huge ready-made market.
3. Power Tip eliminates guesswork, reduces profit-robbing "come backs."
4. Power Tip increases customer satisfaction, hence increases your sale of other products and services.
5. Power Tip eliminates the necessity for carrying special hot and cold plugs for overhead-valve V-8 engines, gives you faster turnover and more profit.

Call your jobber for a supply of Auto-Lite Resistor Spark Plugs with Power Tip. You'll find it good business to have them on hand and recommend them to your customers. Do this today!

It's the **POWER TIP**
that makes
the difference!



Ordinary Plug Tip

New Power Tip

AUTO-LITE RESISTOR SPARK PLUG WITH POWER TIP

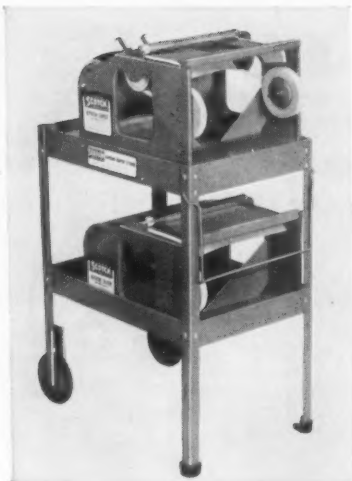
THE ELECTRIC AUTO-LITE COMPANY—TOLEDO 1, OHIO

Reg. U.S. Pat. Off.

SCOTCH[®] Masking Tape

BRAND

...the only tape that gives you every feature you need!



It's the tape with the perfectly *balanced construction*—designed to help you turn out quality repaint jobs in less time. Balanced adhesive sticks tight *instantly*, yet strips off cleanly. Weather-balanced for all climate conditions...hot, cold, wet or dry. Balanced right for curves and contours...extra-thin...extra-flexible—with the crepe back that allows just the right dead stretch.

That's "SCOTCH" Brand Masking Tape—a favorite for over 30 years. Order some today!

"SCOTCH" MULTIPLE APRON TAPER set-up delivers pre-taped aprons in a choice of three widths: 6" and 3" or 9" and 3" from upper shelf unit. Unit on lower shelf of "SCOTCH" stand furnishes aprons 12" wide.

Order now from your 3M Jobber

3M Automotive Products

Ask your 3M Salesman about the 3M "Bumper-to-Bumper" Masking System



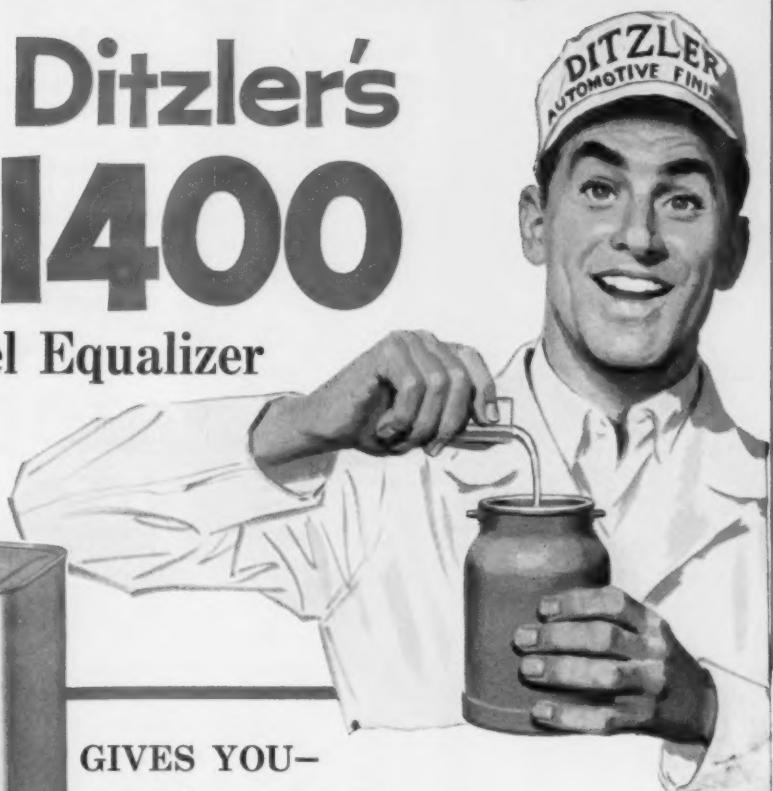
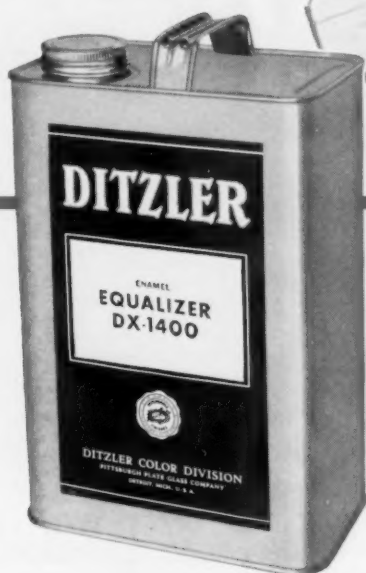
Made in U.S.A. by Minnesota Mining and Mfg. Co., St. Paul 6, Minn. Export Sales Office: 99 Park Avenue, New York 16, N.Y. In Canada: P.O. Box 757, London, Ontario.



For smoother, better-looking work

...use Ditzler's DX-1400

Enamel Equalizer



GIVES YOU—

1. Improved flow-out
2. Better control on matching metallics
3. Economy and flexibility in air-dry or baking applications
4. Increased build of enamel film
5. Excellent depth and gloss
6. Harder finish

FOR AIR DRY—

● Resists wrinkling when enamel is loaded. Added protection during hot humid weather or premature exposure to hot sun. Helps eliminate sags and runs.

FOR BAKING—

● Concentrated baking converter. Economical (only 1 oz. per quart). No special baking type reducers needed.

FOR HOT SPRAY—

● Provides added safety factor. Equalizes stresses set up when hot enamel hits cold surface. Allows heavy film to flow out for top appearance value.

FOR ANY APPLICATION—

● DX-1400 Ditzler Enamel Equalizer will make enamel jobs easier—give your customer more satisfaction when the job is completed.

DITZLER COLOR DIVISION, Pittsburgh Plate Glass Company, 8000 West Chicago Avenue, Detroit 4, Michigan



DITZLER

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED



CORNWELL
Electrolyte

CORNWELL
CHEMICAL
CORPORATION
ELECTROLYTE

FOR DRY CHARGED
BATTERIES

MEETS ALL BATTERY SPECIFICATIONS

For Dry Charged Batteries

MEETS ALL BATTERY SPECIFICATIONS



**12 Disposable 1 Qt.
Glass Bottles Packed in
Reinforced I. C. C.
Approved Carton**

**GUARANTEED
AGAINST
BREAKAGE!**

Available in Export Crates
For Quotations Dept. MA 4

Cornwell Chemical Corp.
Executive Offices: 24 East 38th St.,
New York 16, MURRAY HILL 3-0174
Sales Offices: Cornwells Heights, Pa.
(Philadelphia), Cornwells 0700 —
ORchard 3-2088; 744 Broad Street,
Newark, N. J., MARket 4-2776

Chrysler Building . . .

Continued from Page 162

ture will have seven classrooms equipped with hydraulic hoists and each room in this group will have a door leading to the outside of the building so that cars and trucks can be driven directly into the classroom for instructional purposes. Separate training rooms will be maintained by the Plymouth, Dodge, DeSoto, Chrysler, Dodge Truck, and Automotive Body Divisions. The last named will have a paint spray booth with dryer and exhaust system.

*"Has your husband given up golf?"
"Yes, but he still uses the language
when changing tires."*

USAC Opens Door For Race Drivers

The United States Auto Club has thrown its doors wide open to all race drivers regardless of affiliation. In making the announcement, Duane Carter, Director of Competition for USAC said, "As far as we are concerned the word 'outlaw' does not exist."

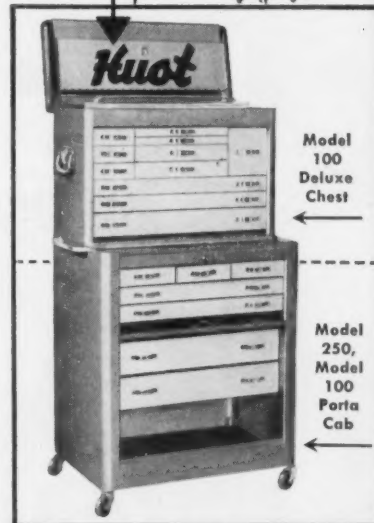
Under their new ruling any race driver may compete with his own association, come over to USAC and compete, go back to his own group, and return to USAC without penalty. Now USAC drivers will be allowed to compete with other sanctioning bodies, such as NASCAR, so long as that date does not interfere with a USAC race.

"The only rule we have on the matter," said Carter, "is the driver must belong to USAC. If he comes to us for a race from another association, he must also join ours and abide by our rules.

"We feel that by making this decision we are allowing all drivers in the country to compete wherever they feel they have the best opportunity of making a living and without suffering any penalty."

The new ruling will also allow for the exchange of cars so long as they are within the specifications and safety requirements of USAC.

SIGN of a proud craftsman



Everywhere you look—you'll find quality Huot tool chests on the job. Automotive mechanics all over the country prefer Huot chests for sure protection of fine tools and to keep everyday tools handy.

The Model 100 deluxe chest has 11 free-sliding, non-spilling drawers—with 7 of them cork-lined for storing precision tools. 3 large drawers store bulky, heavy tools. A large drawer $4\frac{3}{4}'' \times 11'' \times 6\frac{1}{4}''$ easily handles any $\frac{1}{4}''$ electric drill. The portable tote tray on the top shelf is ideal for small tools. Baked on finish in two tone blue and gray makes the chest grease and oil resistant. The chest locks completely with one twist of built-in lock.



3 drawers $1\frac{3}{4}'' \times 4\frac{3}{4}'' \times 11''$
2 drawers $\frac{7}{8}'' \times 11'' \times 11''$
2 drawers $1\frac{3}{4}'' \times 11'' \times 11''$
1 drawer $6\frac{1}{4}'' \times 4\frac{3}{4}'' \times 11''$
2 drawers $1\frac{3}{4}'' \times 23'' \times 11''$
1 drawer $2\frac{3}{4}'' \times 23'' \times 11''$

The Model 250 is a complete rolling workbench. It can also be used as a portable base for the Model 100 shown above. Ruggedly built of heavy formed and welded steel, it has a single built in lock to secure the Hyde-Way front panel.

Drawers are free sliding . . . lower drawers are equipped with oversized rails to handle extra weight . . . 3 drawers have movable dividers . . . 3 top drawers are cork lined. Cabinet available with "Flying Saucer" or 4 inch casters for mobility over rough floors. *Drawer dimensions:*



3 drawers $1\frac{3}{4}'' \times 6\frac{1}{4}'' \times 16''$
2 drawers $1\frac{3}{4}'' \times 21\frac{1}{2}'' \times 16''$
2 drawers $3\frac{3}{4}'' \times 21\frac{1}{2}'' \times 16''$

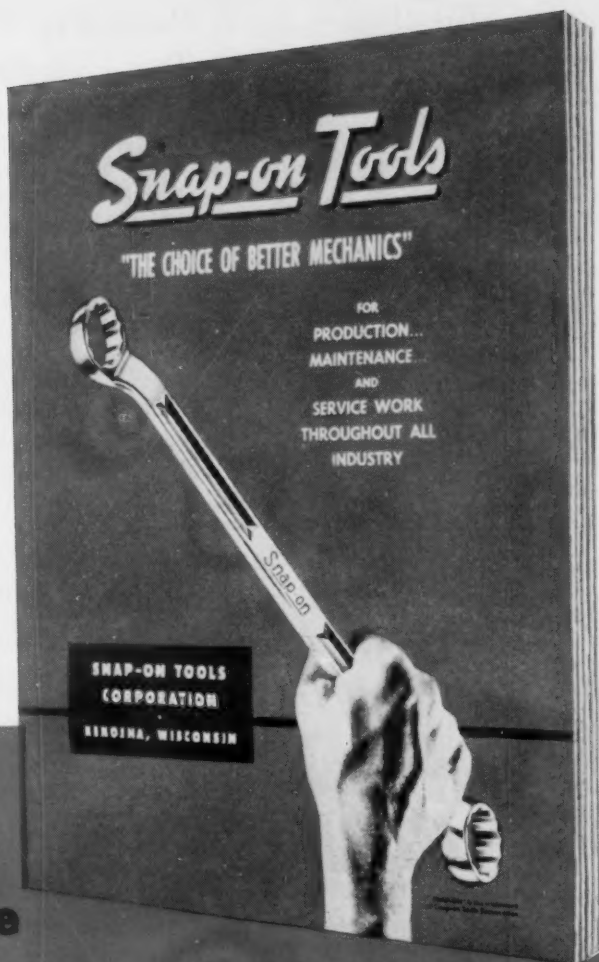
See your jobber or write for bulletin

HUOT MANUFACTURING COMPANY
585 N. Wheeler Street, St. Paul 4, Minnesota

FREE

Snap-on **TOOL** **CATALOG**

**New Help
in Selecting the
Very Latest Automotive Tools...**



It's here — your new 108-page *Snap-on* tool catalog describing in detail the *Snap-on* line of over 4,000 tools. Big pictures and complete specifications help you select the tools you need. Sockets, wrenches, screwdrivers, etc., are shown both individually and in full tool sets.

Complete descriptions and illustrations of *Snap-on's* outstanding line of tool chests and cabs. Full details on *Snap-on's* wide range of shop equipment including bench grinders, electric drills, valve refacers, hydraulic body repair tools, latest automatic transmission tools — many labor-saving specials.

Ask your SNAP-ON man for this new SNAP-ON Catalog "V" or write for your copy.

SNAP-ON TOOLS CORPORATION

8036-D 28th Avenue • Kenosha, Wisconsin

*Snap-on is the trademark of Snap-on Tools Corporation.





why clean
metal parts
the hard way?

USE
**E-CON-O
clene**

A new multipurpose cleaner concentrate. Use hot or cold. Mix with water, solvent or kerosene. Removes oil, grease, resin, tars and decarbonizes, too!

**SPRAY
BRUSH
DIP**



Bendix Products Division,
Bendix Aviation Corp.,
South Bend, Ind.

Poland to Build Two-Cylinder Car

Poland's automobile industry is completing tests for the production of a new two-cylinder, four-passenger sedan adapted to the country's road conditions. The car, known as the Syrena (Mermaid), will have a cruising speed of 50 miles per hour and a top speed of about 64.

The Syrena's interior is so arranged that the backs of the front seats can be lowered to make two sleeping bunks. Many of the Syrena's parts are interchangeable with those of an older Polish car—the four-cylinder, five-passenger Warszawa (Warsaw). Plans have been worked out for the assembly of both automobiles on the same line of the Zeran automobile plant in the Polish capital.

"Daddy, what's an angel?"
"A pedestrian who jumped too late."

NADA Setting Up Conference Series

The first Working Conference for new car and new truck dealers, sponsored by the National Automobile Dealers Association, will open up April 27, in the Palm Terrace Suite of the Hotel Roosevelt in New York City.

The conference will aim at setting up a forum for dealers to exchange ideas and experiences, learn how to serve the public better and still realize a greater profit in their dealership activity.

The initial conference will be limited to 500 dealers and is restricted to new car and new truck merchants in the northeastern United States. Similar meetings are planned for the balance of the country.

"Auto dealers, who are the point of contact to the auto-buying public, are acutely aware of the deficiencies of the industry," reports NADA. "How to make a fair profit and still satisfy the car owners, manufacturers and their own employees is a terrific challenge today."

**no other plier
DOES SO MANY
JOBS SO WELL**



Interlocking
channels . . .
a Channellock
exclusive

Re-inforced tension
edge . . .
another Chan-
nellock exclu-
sive

CHAN NEL LOCK

No. 420

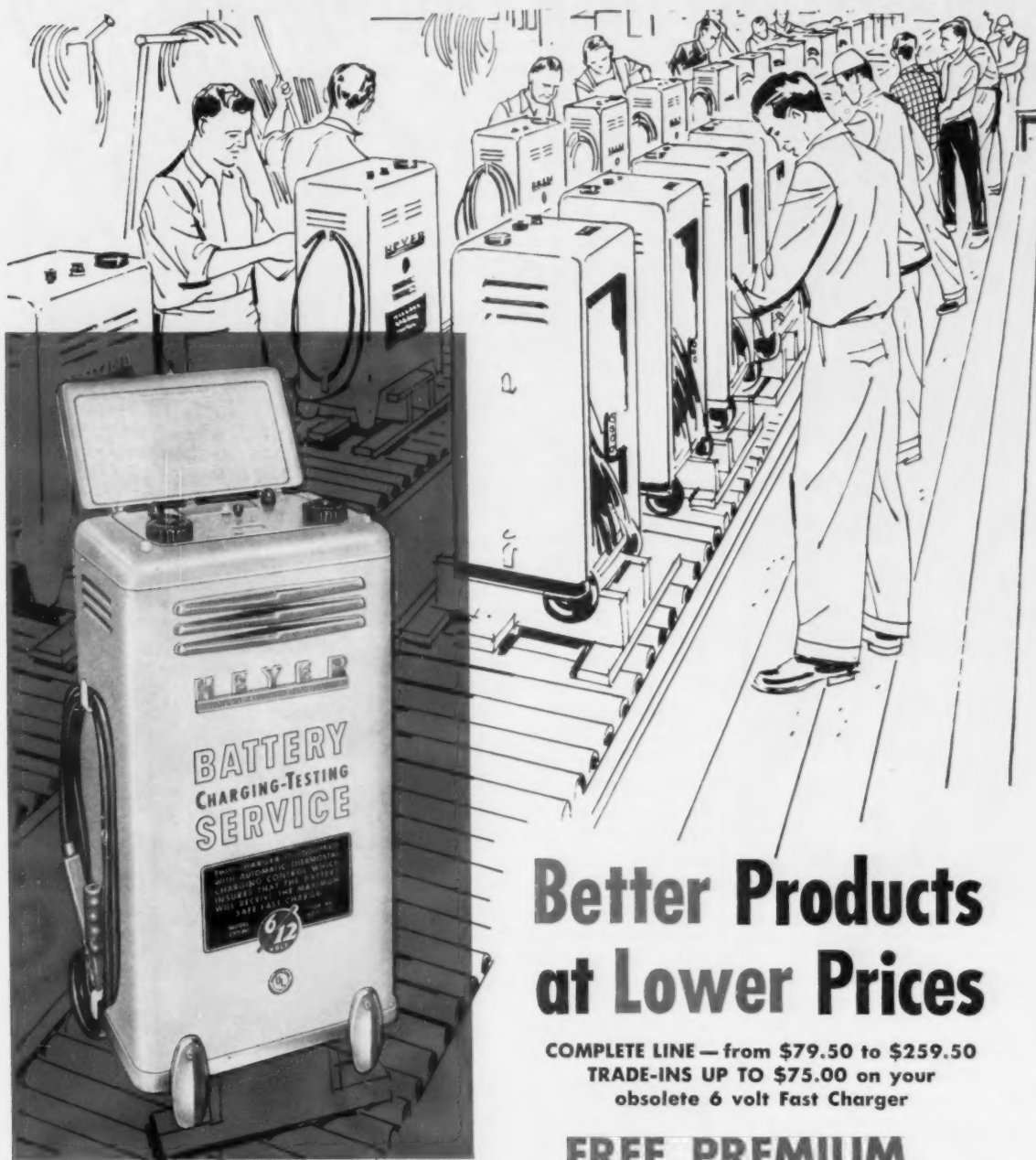
Help yourself to a Channellock No. 420 . . . the handiest plier of them all. It grips like a pipe wrench . . . is easy to use in hard-to-get-at places. And Channellock has gripping features found in no other plier: Interlocking channels that can't slip or "jump out" and the reinforced tension edge that withstands maximum gripping force. These exclusive features are the reasons why Channellock is the first choice of mechanics everywhere. So ask for Channellock . . . and be sure you get *genuine* Channellock. Look for the trade mark on the handle.

CHANNELLOCK
first choice of skilled Mechanics



CHAMPION PLIER TOOL COMPANY
MEADVILLE, PENNSYLVANIA

HEYER MODERN ASSEMBLY LINES PRODUCE OVER 5,000 CHARGERS A MONTH



This Super Deluxe Battery Fast Charger-Tester Model 250MT is available in White, Red or beautiful Hammer-tone Grey. 110/60 amps • 6/12 volts only \$**259** 50 LIST

less trade-in and plus premium

Better Products at Lower Prices

COMPLETE LINE — from \$79.50 to \$259.50

TRADE-INS UP TO \$75.00 on your
obsolete 6 volt Fast Charger

FREE PREMIUM

for a limited time only we are offering an "Equipment Bonus" of a choice of several useful equipment items — worth up to \$30.00. In addition to the liberal trade-in allowance.

CALL YOUR JOBBER TODAY!

HEYER

INDUSTRIES INCORPORATED
BELLEVILLE 9, NEW JERSEY

WORLD'S LARGEST MANUFACTURER OF FAST BATTERY CHARGERS

West Coast Distributor: Shields, Harper & Co., Oakland, California
In Canada: Regent Equipment Manufacturing Company, Ltd., Toronto

WILLIAMS

"WORKSHOP ON WHEELS"



Here is a complete set-up unmatched for quality, convenience and value. Available in separate units or combinations: —

★ 1001 Superchest® — 100 pieces: 44 sockets, 32 attachments, 24 wrenches.

★ 2001 Superchest® — 149 pieces: 51 sockets, 37 attachments, 61 wrenches.

★ MOBILE TOOL CABINET — Sturdy Steel construction, 17" deep x 25" wide x 32" high. Three inch Rubber tired wheels, removable Masonite top. Three drawers and compartment lock.

SEE THEM IN CATALOG 402



J. H. WILLIAMS & CO.

420 Vulcan Street • Buffalo 7, N. Y.

Charters Granted

More than the required minimum of 25 automotive manufacturers' salesmen have presented qualifying credentials and fulfilled other requirements so that on February 15 the Executive Council of A.B.C. International, Inc., unanimously approved a charter for the group to be officially known as Automotive Booster Club No. 47, Fargo, North Dakota. Walter A. Arnold, formerly of B-8 Minneapolis, who served as "sparkplug" for the group, along with Byron Davenport, also of B-8, was elected charter president. Other officers are: 1st vice-president, B. W. Davenport; 2nd vice-president, Eugene Brown; secretary, R. L. Briggs; and treasurer, G. E. McDonald.

The second charter granted in 1956 went to the group in San Antonio, Texas, where again more than the minimum requirements were met. This qualified group was unanimously chartered by the Executive Council under the official name of Automotive Booster Club No. 48, San Antonio, Texas. Many of the members were former members of B-30 Houston, which club co-operated fully with the organizing of the new club. Rowland W. Johnson, formerly of B-30, was elected charter president. He lives at 503 John Adams Drive, San Antonio, Texas. Other officers are: vice-pres., J. R. Meadows, secretary, A. A. Sneed, and treasurer, H. M. Spear.



J. B. "KIP" ANGER, Motorola sales manager for home and car radios, shows Friggle Smith one of Motorola's new search-tuning car radios.

SPECIFIED for ALL EXPOSED PARTS!

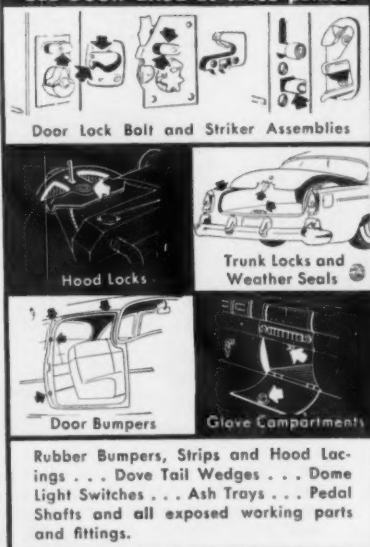


DOOR-EASE®

STAINLESS STICK LUBRICANT

Where cleanliness and performance is a MUST — nothing does the job like DOOR-EASE Stainless Stick Lubricant! Unlike soft grease or oils, DOOR-EASE leaves a smooth-spreading, tough, long-wearing film that won't flake or rub off. Won't stain clothing or upholstery. No wonder DOOR-EASE is specified for all exposed parts and fittings by leading car manufacturers and oil companies. Shop size for service use; Universal for resale. From jobbers everywhere.

Use DOOR-EASE at these points



REMEMBER...

A little DOOR-EASE goes a long way — stops squeaks... lasts the life of a lube job. Withstands summer heat and winter cold; water resistant.



AMERICAN GREASE STICK CO.
MUSKEGON, MICHIGAN

Once again! **Willard** MAKES BATTERY HISTORY!

New Willard Profit Proposition Loaded with Selling Features!



NEW PRICES—more
competitive than ever!



**COMPLETE 12-VOLT
LINE**—10 types in all!



CHARGED BONE-DRY
at no extra charge!



PRICE LINE BATTERIES
with premium features

New selling features, new fast-moving products, new, more competitive prices . . . those are just three reasons why the Willard Profit Proposition is the top proposition in the battery industry today!

But don't take our word for it . . . call your nearby Willard Distributor . . . let him show you how you, too, can increase battery sales *and profits* with Willard—the long-guarantee batteries you can sell with confidence!

PLUS... new improved
Willard Fast Chargers
for **EXTRA** Service Profits!

Floor models . . . portables . . . utility models . . . for both 6- and 12-volt batteries . . . you'll find them, as well as home booster chargers, in the new and improved line of Willard Fast Chargers for 1956.



NOW only \$99.95 exchange...
Save \$66.55
On Regular \$166.50 Charger

Here's the biggest charger value in Willard history. Accurate Electric Timer Control. 100 Amps. charging rate on 6-volt batteries . . . 50 Amps. on 12-volt models. Trade in your old charger now! If your distributor cannot supply you, write direct to Willard Storage Battery Division, Cleveland 1, Ohio.
Special Introductory Offer Expires May 31, 1956.

CALL YOUR NEAREST Willard DISTRIBUTOR TODAY!



U.S. PATENT NO. 2,707,051

FILT-O-REG

FUEL PRESSURE REGULATOR & FUEL FILTER

FILT-O-REG cuts fuel waste, prevents stalling, stops flooding. It feeds the full and correct amount of filtered fuel to the carburetor at minimum pressure under any load, at all speeds and extreme weather temperatures. Guaranteed to exert a maximum of 2 lbs. P.S.I. constant fuel pressure on the carburetor float valve and seat. This provides the proper float level under all driving conditions. **FILT-O-REG** fits in the fuel line between the fuel pump and the carburetor. Factory set...no adjustment is ever necessary.

ORDER FROM YOUR JOBBER

Alondra Sales, Inc.
959 CRENSHAW BLVD.
LOS ANGELES 19, CALIF.

Annual Advertising Awards Announced

Ten automotive jobbers in the U. S. and one in Canada have been named winners in the Annual Advertising Awards, jointly sponsored by Jobber Topics and Automotive Advertisers Council.

Winners who were selected by a special committee made up of AAC, NSPA and MEWA executives departed from the customary three jobber size groups of former years, with U. S. entries being divided into four annual volume brackets. Canadian entries were grouped in a single class.

The 1955 winners whose advertising, sales promotion and publicity programs were judged best were:

Under \$500,000 Volume—FIRST: Richard G. Pfeiffer, Richard G. Pfeiffer, Inc., Orange, New Jersey. **SECOND:** G. Norman Herberg, Herberg Auto Service, Inc., Burlington, Vt. **THIRD:** Saul Ganz, The Maplecrest Battery & Ignition Co., Maplewood, N. J. **HONORABLE MENTION:** Etta Miller, Nyack Auto Parts, Inc., Nyack, New York.

\$500,000 to \$1,000,000 Volume—FIRST: William Schwartz, Unit Parts Corp., Buffalo, N. Y.

\$1,000,000 to \$2,000,000 Volume—FIRST: Norman Cohen, Cohen Auto Parts Co., Erie, Pa. **SECOND:** O. M. Anderson, Northern Supply Co., Bay City, Mich. **THIRD:** Paul D. Shaw, Womwell Automotive Parts Co., Lexington, Kentucky.

\$2,000,000 and Over Volume—FIRST: Troy Jones, Keenan Auto Parts Co., Albany, Georgia. **SECOND:** William Matley, Myers Motor Supply Co., Joplin, Mo. **THIRD:** R. M. Olson, Service Station Supply, Los Angeles, California.

CANADIAN—C. W. Wilson, St. Clair Automotive Supply Co., Toronto, Ontario.

A man was walking down a dark alley, thinking his own thoughts, and didn't notice the approach of a hold-up man until he felt a gun in his back, and heard "Your life or your money."

"Take my life!" the victim replied promptly, "I'm saving my money for my old age."

Truck Wheel Changes —a one-man job with **KEN-TOOL** IMPACT WRENCH SETS

Ken-Tool Impact Wrench Handles swing freely through a 120° arc... strike with tremendous force. Loosen rusted, frozen nuts fast. Long shaft keeps handle clear of truck or bus bodies.



SEE YOUR JOBBER on the complete line of Job-Designed Ken-Tools. Forged by the largest exclusive manufacturer of top-quality Tire-changing Tools and Equipment. **THE KEN-TOOL MFG. CO., AKRON 5, OHIO.**



The Mechanic's Best Friend!



**no road-trouble
when we
use**





how to
MAKE TIME
 on a paint job

USE
ARCO 45 *

*the automotive enamel
 that air dries
 for delivery
 in any weather
 in*

45 MINUTES

*...for two-toning new cars
 ...panel repair...and
 complete refinishing!*



* TRADE MARK

TESTED FIRST TO LAST

Mail Coupon For Information
 and Color Card on Arco 45.



THE ARCO COMPANY, Dept. 102
 7301 Bessemer Avenue
 Cleveland 27, Ohio

Gentlemen: Please send me complete information on Arco 45.

Name _____

Company _____

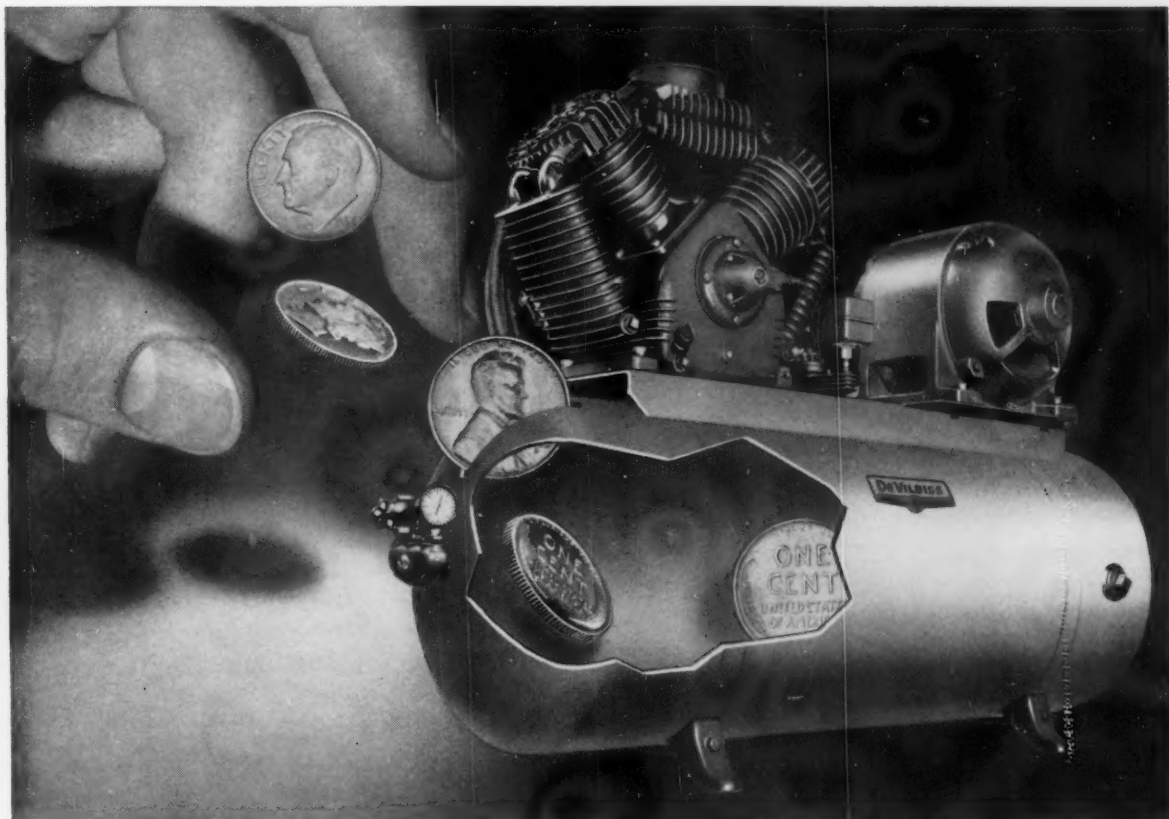
Address _____

City _____ Zone _____ State _____

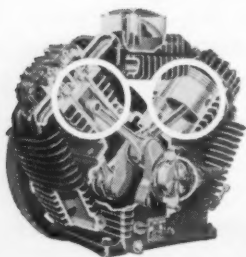
DeVilbiss Air Compressors

You'll be money ahead, and have compressed air to spare, when you change to a new DeVilbiss air compressor. For by comparative test, they deliver 22.6% more air per power dollar than most other makes! Remember this the next time someone offers you a "bargain" on the purchase price of a compressor. Because the big item in the total cost of compressed air is the cost of operation.

save up to 22.6c of your power dollar



Low-friction design makes the difference . . . returns your investment thru power savings, reduced maintenance!



The remarkable savings you make with DeVilbiss Air Compressors result from their low-friction design — (1) shorter piston stroke (2) slower piston travel (3) ball-bearing-mounted crank shaft (4) full-floating piston pins, and

(5) metered oil feed to all bearings. These features not only bring savings in power, but lower maintenance and depreciation costs! For data on compressors, or quality spray equipment, call your DeVilbiss supplier.

THE DEVILBISS COMPANY
Toledo 1, Ohio

Santa Clara, Calif. • Barrie, Ontario • London, England
BRANCH OFFICES IN PRINCIPAL CITIES

FOR BETTER SERVICE, BUY

DEVILBISS





WAITING for session to start at a recent Grizzly Passenger Car Brake Clinic held at Green's Garage in Folsom, Pa., are these brake servicemen and dealers. Clinic was presented by Tom Morgan, eastern sales manager of the Grizzly Manufacturing Division; Bruce Nash, Philadelphia Division manager; and Harold Borgstrom, Baltimore Division manager.

Alonzo G. Decker

Alonzo Galloway Decker, Chairman of the Board, President and one of the founders of The Black & Decker Mfg. Co., world's largest makers of portable electric tools, died at Union Memorial Hospital, Baltimore, on March 18.

Mr. Decker, 72, was stricken with a cerebral hemorrhage at about 4 o'clock on Friday afternoon, March 16, while talking with a visitor in his office at the Company's plant in Towson. He apparently had been in good health and had recently returned from a vacation in Florida.

Mr. Decker had been president of Black & Decker since the death of its other founder, S. Duncan Black, in 1951. Before that, and ever since the two men started in business together in 1910, Mr. Decker had served as vice-president and general manager.

Safety Committee

Recent Appointments

The appointments of Frederick M. Sutter, Dodge-Plymouth dealer, Columbus, Indiana, first vice-president of the National Automobile Dealers Association, and Dean Chaffin, Cadillac-Buick-Chevrolet dealer, Bozeman, Montana, chairman of the National Affairs Com-

mittee of NADA, to serve on the national Inter-Industry Highway Safety Committee were announced by A. vanderZee, chairman of the Committee and vice-president of the Chrysler Corporation.

Other NADA representatives on the Committee are: Charles C. Freed, NADA past president (DeSoto-Plymouth dealer of Salt Lake City); Carl E. Fribley, NADA president (Cadillac-Pontiac dealer of Norwich, New York); and Frank H. Yarnall, immediate past president of NADA (Chevrolet dealer of Chicago).

In addition to Mr. vanderZee, representatives of the automobile manufacturers serving on the Committee are: W. F. Hufstader, vice-president, General Motors Corporation; Dan O'Madigan, Jr., director of sales services and distribution, Studebaker-Packard Corporation; N. K. VanDerzee, vice-president, American Motors Corporation; and Walker Williams, vice-president, Sales and Advertising, Ford Motor Co.

Transmission Adopted

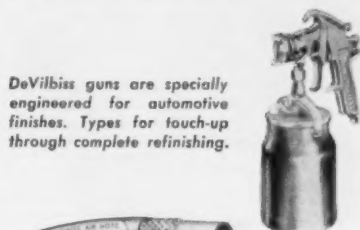
Borg-Warner's Ford-O-Matic type transmission has been adopted as optional equipment by one of the major heavy duty truck builders. This type of drive is built by Warner Gear and the B-W automatic transmission plant in Decatur.



Here's a PROFIT PLAN FOR YOUR PAINT SHOP

Appearance service is hailed as one of the year-round profit leaders in the trade—often accounting for one-third or more of service-department volume. You can *best* take advantage of it by outfitting your paint shop with DeVilbiss spray equipment.

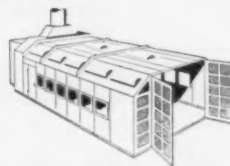
Only a modest investment, and you'll give your customers factory-quality finishes at production-line speeds. And you'll get a big profit bonus! Call your DeVilbiss supplier now for full data on DeVilbiss' complete line of spray equipment.



DeVilbiss guns are specially engineered for automotive finishes. Types for touch-up through complete refinishing.



DeVilbiss hose—special braid construction withstands hard wear and kinking; yet hose is light and flexible.



DeVilbiss spray booths provide dust protection, proper lighting and exhaust for flawless finishes.

THE DEVILBISS COMPANY
Toledo 1, Ohio

Santa Clara, Calif.
Barrie, Ontario
London, England

FOR BETTER SERVICE, BUY

DEVILBISS



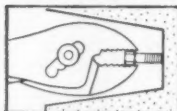
BRANCH OFFICES IN PRINCIPAL CITIES

GIVES A FIRMER GRIP

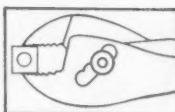


New GRIPSO Multi-Duty 10-1 LEVERAGE PLIERS

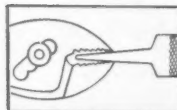
Say goodbye forever to pliers that slip off work skinning knuckles and chewing corners off nuts and bolts. With Gripso Multi-Duty you can hold square, round or tapered objects securely with just a slight grip. Excellent in tight hard-to-reach spots—safe at any angle. Jaws open parallel in 4 positions. Serves as nut wrench and small pipe wrench as well as versatile leverage pliers. Forged of finest chrome-moly steel. Guaranteed.



Diagonal 4-position slots give closer easier jaw adjustments—eliminate wedge action and wear.



Powerful grip—cannot be pulled off tang of file—will not slip off cotter keys.



Other GRIPSO Specialty TOOLS

GRIPSO VISE PLIERS

Triggermatic

One-Ton-Grip releases smoothly with pull on trigger.



Fingertip Release

Adjusts, locks, releases all with one hand.



GRIPSOMATIC PIPE WRENCH



Lightweight, faster adjusting, streamlined, 14 and 10 inch.

See your dealer — or write
H. R. BASFORD CO.
235 - 15th St., San Francisco 3, Calif.

Coming Events

Dealers Conventions

- May 14-15—Pennsylvania Automotive Assn., The Inn, Buck Hill Falls, Pa.
- May 14-15 — Missouri Automobile Dealers' Assn., Muehlebach Hotel, Kansas City, Mo.
- May 26-28—South Carolina Automobile Dealers Assn., Ocean Forest Hotel, Myrtle Beach, S. C.
- June 25-27 — Michigan Automobile Dealers Assn., Hotel Olds, Lansing, Mich.
- June 28-July 1—New York State Automobile Dealers, Inc., Directors and County Vice-Pres. Spring Meeting, Lake Placid Club, Lake Placid, N. Y.
- Sept. 17-18 — Minnesota Automobile Dealers Assn., St. Paul Hotel, St. Paul, Minn.
- Sept. 24-25 — Wisconsin Automotive Trades Assn., Hotel Schroeder, Milwaukee.
- Sept. 30-Oct. 3—New York State Automobile Dealers, Inc., 33rd Annual Convention, The Concord, Kamesha Lake, N. Y.
- Oct. 21-23—Florida Automobile Dealers Assn., Fort Harrison Hotel, Clearwater, Fla.
- Oct. 21-23—Tenth Annual Convention, National Independent Automobile Dealers Assn., Hotel New Yorker, New York City.
- Nov. 11-13 — Kentucky Automobile Dealers Assn., Seelbach Hotel, Louisville, Kentucky.
- Dec. 2-4—Ohio Automotive Dealers Assn., Cleveland, Ohio.
- Jan. 26-30—40th annual NADA Convention and Equipment Exhibition, San Francisco, Calif.

Automobile Shows

- Jan. 5-13—Chicago Auto Show, International Amphitheatre, Chicago, Ill.

General

- Apr. 16-20—New York's Annual Safety Convention and Exposition, Hotel Statler, New York, N. Y.
- Apr. 19-29—General Motors Motordrome, National Guard Armory, Boston, Mass.
- April 28-May 6—International Automobile Show, Exhibition Hall, Coliseum, New York, N. Y.
- May 16-18—Gasoline Pump Manufacturers Association, annual general meeting, White Sulphur Springs, West Virginia.
- June 3-8—Society of Automotive Engineers Summer Meeting, Chalfonte-Haddon Hall, Atlantic City, N. J.
- June 13—Pennsylvania Grade Crude Oil Assn., 33rd annual meeting, Pennhills Club, Bradford, Pa.
- Sept. 20-22—Automotive Parts, Rebuilders Association Convention and Trade Show, Edgewater Beach Hotel, Chicago, Ill.

Classified Advertisement

For Sale—Historic Automobile Collection, from 1900 to 1910—all in running condition. Roger Sceaux, 4 rue Beaurépaire, Pantin (Seine) FRANCE.

SILCO Penetrant

**FREES
FROZEN BATTERY
TERMINALS!!**

LOOSENS CORRODED NUTS!!
and 1000 other uses!
It's concentrated!
It dissolves rust!
Has no unpleasant odor!

The Mechanic's Silent Partner!
Money-back guarantee!

PETROLEUM SOLVENTS CORPORATION, N. Y. 17, N. Y.
IN CANADA: MONTREAL, QUE.

JUST SPRAY IT ON!

ACRA-SEAL®

PLASTIC SPRAY

Waterproofs-Rustproofs
Seals out moisture, oils
and greases, insulates
ignition systems.

with DAUBER
ask for IGNITION SEAL
at Automotive Jobbers

RADIATOR SPECIALTY CO.
Charlotte, North Carolina

Swiss

Tin-Spred TINNING COMPOUND

Cleans and tins pot metal, welds, and aluminum—in one operation. Tins right through grease or rust. Order from your jobber.

1 lb. can \$1.50 2 lb. can \$2.50

SWISS LABORATORY, Cleveland 14, Ohio

Better try the
new, improved

SOL-SPEEDI-DRI!

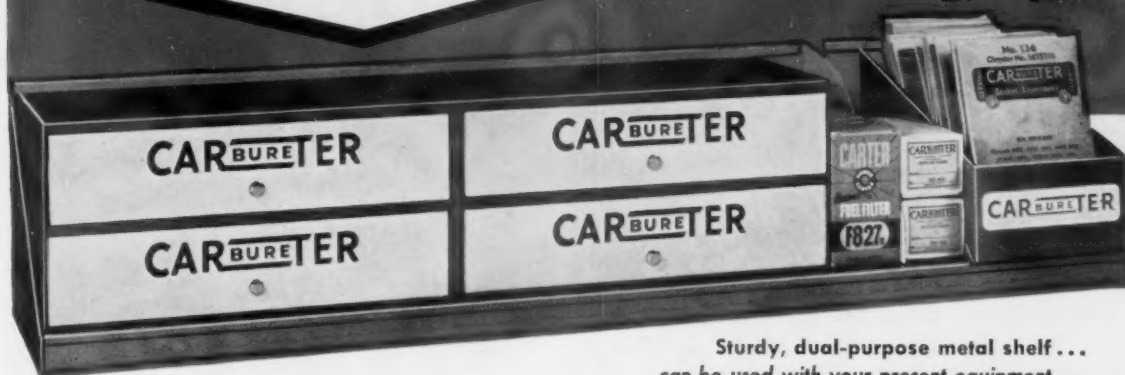
- GREATER OIL RETENTION than ever before!
- The most DUSTLESS oil and grease absorbent you can buy!

GET A FREE SAMPLE FROM
SPEEDI-DRI CORP., Menlo Park, N.J.

Buy Bonds

Chilton's MOTOR AGE, APRIL, 1956

there's business
on this shelf!



Sturdy, dual-purpose metal shelf...
can be used with your present equipment
... can also be used by itself as a wall hanger.

CARTER



PARTS SHELF ASSORTMENT

No. S152A

With this Carter Parts Shelf Assortment you're set to service popular Carter Carbureters on car models ranging from 1939 through 1956.

The shelf itself is handsome and rugged. The four-drawer metal cabinet features individual corrugated containers with imprinted parts numbers.

Gasket assortment holder designed for quick reference with ample space for additional assortments.

Be ready early for profitable spring servicing opportunities. Get the complete S152A Parts Shelf Assortment story from your nearest Carter Supplier —call him today!

CARTER CARBURETOR CORPORATION, St. Louis 7, Missouri
Division of ACF INDUSTRIES, INCORPORATED



A NEW SERVICE TOOL for You from



**A \$6.00
VALUE FOR \$3.95**

Here's a solderless terminal value you can't beat! No. 395 Kit, left, with cutting, stripping and crimping tool and assortment of terminals in beautiful plastic pouch . . . plus screw driver shown below, only \$3.95 during introductory period!

No. 395 Kit

No. 395 Kit, above, contains a 3/16" x 3" VACO screw driver, plus crimping tool and 69¢ Pak of assorted terminals during introductory period. Only \$3.95!



**VACO
Screw Driver
FREE!**

NEW, HANDY 69¢ PAK

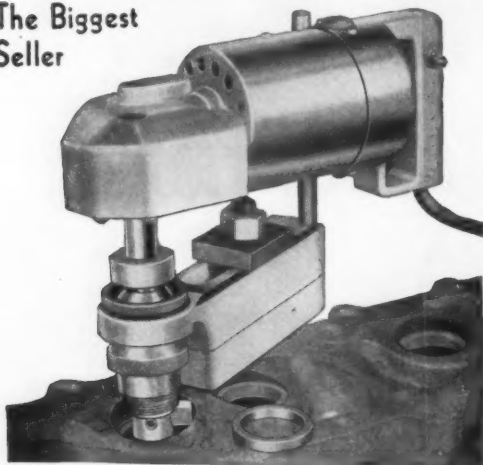
Nothing else like it for convenience on the job. Pak has plastic bubble container with self-dispensing back. Available in all popular styles.

VACO PRODUCTS COMPANY

317 East Ontario Street, Chicago 11, Illinois
In Canada: Vaco Lynn Products, Ltd., Montreal 1, Quebec

The **PIONEER** Tool FOR INSTALLING VALVE SEAT RINGS

The Biggest
Seller



THE FIRST . . . and still the MOST POPULAR, MOST PRACTICAL, SIMPLEST, MOST UNIVERSAL tool of its kind made.

EVERLASTING . . . the first tools made over 25 years ago are still in service.



K.O. LEE CO.
ABERDEEN, SOUTH DAKOTA

If it's made by Lee it's a "Knock-Out"



MOTOR AGE

is

the

best

read

MONTHLY

AUTOMOTIVE

SERVICE

MAGAZINE





"PUROLATOR:

Best for ALL cars!"

... that's what NASCAR drivers say. And, mister, they know! And everyone knows that they know! Because these men drive, hour after hour, at speeds so great, in dust and dirt conditions so bad that 100's of their miles are tougher on oil filters than 1000's of anyone else's miles.

This season—REMEMBER: You'll make more friends faster, bank more money, with the new Silver-Jacket Purolator Micronic—the filter that's engineered to fit *all* cars—and tough enough to take today's tougher driving!

PUROLATOR

America's No. 1 OIL FILTER

PUROLATOR PRODUCTS, INC., Rahway, New Jersey; Toronto, Ontario, Canada

Best for ALL dealers!"

... that's what dealers say—say so, because they know Purolator is first and finest—proved by 1,000,000's of miles of everyday driving in cars of all makes—proved by going on two years of NASCAR testing. *What's more, dealers know Purolator—backed by powerful sales and advertising effort—backs its dealers with the best profit-proposition the industry has to offer.*

"Purolator" and "Micronic," Reg. U. S. Pat. Off.



GENERAL MANAGER

\$50,000

Our company is a well known manufacturer of metal products, with a long record of profitable operation and annual sales of over \$50,000,000. We have an excellent opportunity for a general manager to direct all phases of an expanding high-production operation.

- The right man should have successful experience as general manager of a company or as manager of a separate division.
- He should have the capacity and the desire to eventually assume even broader responsibilities with our company.
- Preferred age 38 to 50 years.

The new man will immediately be eligible for an excellent bonus and retirement income program.

Your reply will be treated in complete confidence and should include age, present connection and home telephone number.

BOX NO. 37 MOTOR AGE

5601 Chestnut St., Philadelphia 39, Pa.

NEW COMPACT SIZE

Fuel Filter



Lifetime

**micro-bronze
element
never needs
replacement**

Packaged complete with fittings.



KEM

KEM MANUFACTURING CO., INC.

FAIR LAWN, N. J., U.S.A.
CABLE ADDRESS: KEMSALES



**It's EASY to keep your floors
FREE of SLIPPERY OIL SPOTS**

with **Oil-Dri[®]
ABSORBENTS**

the modern, economical oil and
grease absorbents that keep your
floors dry, clean and safe, and re-
duce maintenance costs.

CHECK THESE ADVANTAGES:

- Easy to use — Economical
- Reduce slipping hazards
- Reduce fire hazards
- Improve floor conditions
- Reduce insurance penalties
- Improve working conditions
- Improve floor housekeeping

Oil-Dri Corporation of America

WRITE TODAY FOR FREE
60-SECOND DEMONSTRATION.

SOLD ONLY THROUGH AUTHORIZED WHOLESALERS
520 N. Michigan Ave. Chicago 11, Illinois

in July MOTOR AGE Body Shop Information

—an extra duty issue featuring *Body Shop information*.

A round-up of data on all types of body shop work—MOTOR AGE's method of keeping Automotive Service Specialists, like you, informed always on the latest money-making methods.

It will pay you to read it carefully.

JOBBERS!

Biggest automotive safety check ever brings you substantial new sales opportunities!

Co-sponsored by the Inter-Industry Highway Safety Committee, LOOK MAGAZINE, and the National Safety Council

✓ **OVER 2 MILLION CAR CHECKS**

✓ **COMING IN MAY—ACT NOW!**

✓ **IN MORE THAN 400 CITIES**

✓ **HERE'S HOW IT ALL HELPS YOU:**



- Safety checks on a community-wide basis focus attention on proper car maintenance!
- Everybody will be backing this drive—stressing the importance of car maintenance and repair! Civic leaders and organizations . . . police departments . . . it will be spotlighted in local newspapers, on TV!
- In the interests of safety on the highway, LOOK will highlight this voluntary 10-point safety check program in its May 15th issue, on sale May 1st.
- You can get details on how to set up this program in your community and make it produce extra parts, accessory and service sales for you.

SPECIAL! SPECIAL! SPECIAL!

Make sure your newspaper runs the special 4-page newspaper section on the 10-point safety check program—available whether or not your community ties in. This section has exciting safety check articles that will set off local tie-in advertising. Just think of the sales and enthusiasm this community-wide publicity will generate.

FOR FULL DETAILS ON (1) how to get your newspaper to run the 4-page section; (2) how you can get your complete merchandising kit illustrated above, write to Fred Talento, Asst. Automotive Merchandising Manager, LOOK, 488 Madison Avenue, N. Y. 22, N. Y.

LOOK

leads people to act!

AC Spark Plug Div.	
Electronics Div.	30-31
Headlamps	16-17
Air Express Div.	111
Alondra Sales, Inc.	194
American Bosch Div. Amer.	
Bosch-Arma Corp.	144
American Chain & Cable Co.,	
Inc.	
Manley Div.	128
American Grease Stick Co....	192
Ammco Tools, Inc.	116
Arco Co.	195
Armstrong Rubber Co.	119
Aro Equipment Corp.....	20
Atomized Materials Co.	115
Auto Specialties Mfg. Co. ...	28

Basford Co., H. R.	198
Bean Div., John	180-181
Bear Mfg. Co.	139
Bendix Aviation Corp.	
Products Div.	190
Black & Decker Mfg. Co.	120-121
Blackhawk Mfg. Co.	14-15
Bonney Forge & Tool Wks. ...	108
Bosch Corp., Robert	166
Box 37	202
Briggs Shock Absorber Co. ...	136
Buick Motor Div.	149

Carbide & Carbon Chemicals	
Co.	168
Carter Carburetor Corp.	199
Champion de Arment Tool Co.	190
Chevrolet Div. G. M.	170
Chicago Rawhide Mfg. Co. ...	99
Chilton Company	205
Chrysler Corp. (Parts Div.)..	97
Classified Advertisement	198
Clevite Service, Inc.	135
Commercial Credit Corp.	5
Commercial Solvents Corp..	104-105
Cornwell Chemical Corp.	188

Delco Remy Div.	8-9
De Vilbiss Co.	196-197
Ditzler Color Div.	187
Doan Mfg. Co.	130
Dodge Div. Chrysler Corp. ...	167
Dole Valve Co.	102
du Pont de Nemours Co., Inc.	
Brake Fluid	173
Refinishes	147
Zerone & Zerex	12

Echlin Mfg. Co.	156-157
Electric Auto Lite Co.	
Service & Parts	22-23
Spark Plugs	184-185

Farm Journal	176-177
Federal Mogul Service Div....	6
Federated Metals Div.	122
Felt Products Mfg. Co.	161
Flexonics Corp.	160
Ford Motor Co.	
Parts & Service Sales Dept.	101
Fram Corp.	132-133

Index to Advertisers

This Advertisers' Index is published as a convenience, and not as part of the advertising contract. Every care will be taken to index correctly. No allowance will be made for errors or failure to insert.



Gates Rubber Co.	175
General Electric Co.	171
General S & M Corp.	134
Grand Automotive Products ...	146
Grey Rock Div.	21

Herbrand Tools	110
Heyer Industries, Inc.	191
Holmes Co., Ernest	117
Huot Mfg. Co.	188

Ingersoll-Rand	106-107
Inland Mfg. Co.	154

Johnson Bronze Co.	162
-------------------------	-----

Ken Tool Mfg. Co.	194
Kem Mfg. Co.	202

Lee Co., K. O.	200
Lincoln Electric Co.	118
Link Belt Co.	158
Look Magazine	203

McQuay-Norris Mfg. Co.	
123 thru 126	
Manley Div.	128
Mathieson Chemical Corp.,	
Olin	164-165
Minnesota Mining & Mfg. Co.	
169-186	

Moog Industries, Inc.	159
Moraine Products Div.	178-179

National Motor Bearing Co... 10
New Britain Machine Co. 131

Oakite Products, Inc.	172
Oil-Dri Corp. of Amer.	202
Oldsmobile Div.	163

P & D Mfg. Co.	100
Packard Electric Div.	112-113
Pennzoil Co.	127
Perfect Circle Corp.	95
Permatex Co., Inc.	1
Petroleum Solvents Corp.	150-198
Pontiac Motor Div.	4
Porter, H. K.	151
Purolator Products, Inc.	201

Quaker State Oil Refining Co.	137
------------------------------------	-----

Radiator Specialty Co.	194-198
Ramsey Corp.	3rd Cover
Raybestos Div. Raybestos-	
Manhattan, Inc.	11
Rochester Products Div.	13

Saturday Evening Post	18-19
Schrader's Son Div., A.	109
Sealed Power Corp.	2nd Cover
Sherwin-Williams Co.	155
Snap-on Tools Corp.	189
Sommer & Maca Glass	
Machinery Co.	174
Spee Flo Co.	174
Speedi Dri Corp.	198
Standard Motor Products, Inc.	2
Stant Mfg. Co.	194
Stewart Warner Corp.	
Instrument Div.	174
Sun Oil Co.	32
Sunnen Products Co.	114
Swiss Laboratory	198

Thermoid Co.	Back Cover
Thompson Products, Inc.	
(Service Sales Div.)	129
Thor Power Tool Co.	103
Timken Roller Bearing Co. ...	29
Tung Sol Electric, Inc.	145
Tungsten Contact Mfg. Co....	148

United Motors System ...	182-183
--------------------------	---------

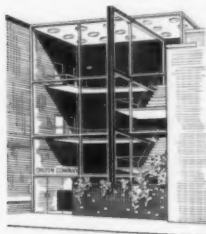
Vaco Products Co.	200
------------------------	-----

Wagner Electric Corp.	26-27
Walker Mfg. Co.....	140 thru 143
Wilkening Mfg. Co.	24-25
Willard Storage Battery Co.	193
Williams & Co., J. H.	192
Wix Corporations	7
Wood Co., Frank N.	138
Wooster Rubber Co.	172
World Bestos	152-153

Talking Shop

Whatever our business, trade or profession, that, we may be certain, is what we'll talk more about than anything else. Talking shop is irresistible. It's a good thing, too. It's an indication of our interest in what concerns us most . . . of our desire to be well informed.

Were it not for business publications, each of us, talking shop, would be restricted to subjective chatter about what personal experience alone has taught us. Business publications are the silent and able moderators of shop talk. Current, thorough, authoritative, they point the way to objective conversation and provide the facts and ideas upon which much of it is based.



The Voice of Authority . . .

Chilton

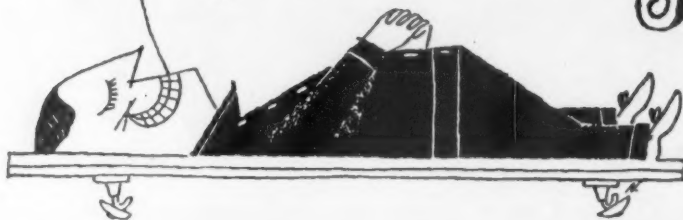
COMPANY

Chestnut and 56th Streets • Philadelphia 39, Pennsylvania



CHILTON PUBLICATIONS: Department Store Economist • The Iron Age • Hardware Age • The Spectator • Hardware World
The Jewelers' Circular-Keystone • Automotive Industries • Gas • Distribution Age • The Optical Journal and Review of Optometry
Motor Age • Boot and Shoe Recorder • Commercial Car Journal • Butane-Propane News • Tele-Tech & Electronic Industries

The Last Laugh



An officer approached a drunk who was trying to get the key into his car door lock. "Look here," he said, "you don't mean to tell me that you intend to drive that car?"

"Sure," replied the drunk.—"Can't you see I'm in no condition to walk!"

Waitress: Another sandwich, sir? Will there be anything else?

Patron: Yes, a paperweight. The other sandwich blew away.

Two guys met at a bar. "Say," said the first, "what does your wife say when you stay out as late as this?"

"Nothing," replied the other, "I'm not married."

The first fellow pondered for a moment and said, "Then why do you stay out as late as this?"

Young lady: Can you squeeze me in here?

Bus driver: Why, yes, Miss, if someone else will drive the bus.



Passenger: You say you'll have to circle back because you missed New York. How could you possibly miss a huge city like that?

Jet plane pilot: I blinked.

A student reporter on a high school paper, covering a class play, hit the literary jackpot when he wrote:

"The high school auditorium was filled with expectant mothers eagerly awaiting the appearance of their offspring."

"My truck was stolen yesterday." "Did you get a look at the guy who stole it?"

"No, but I got his license number."

Hotel Clerk: I'm sorry; we don't have room service. You'll have to make your own bed.

Prospective guest: That's all right.

Clerk: Very well. You'll find a hammer, saw, nails and lumber in the back room.

A sales manager hired a man who stoutly proclaimed he was the best salesman in the world. Upon receiving nothing but expense accounts for several weeks he recalled the salesman to the home office.

"I thought you were the best salesman in the world," was his greeting.

"No, I've decided I'm the next best salesman in the world. The best salesman in the world is the one that sold you that stuff I've been trying to sell for you."

Coed: "I'll stand on my head or bust."

Instructor: "Just stand on your head. We don't expect too much."

A stingy husband, while out of town, sent his wife as a present a check for a million kisses. The wife, a little annoyed, sent back a post card: "Dear Jim, thanks for the birthday check. The milkman cashed it for me this morning."





the Ramco Jobber Displaying this Sign is A GOOD MAN TO KNOW!

*Why not get acquainted by phoning him for a
FREE COPY OF THE INSIDE FACTS BOOKLET?*

The Jobber displaying this sign is recommending THE RAMCO RING LINE for your every job . . . from the oldest to the newest of the new family of engines. Reasons? Plenty of them! And a lot of the most important are printed in the INSIDE FACTS BOOKLET . . . a complimentary copy of which your Jobber will be glad to give free of all cost or obligation. Or you may write Ramsey Corporation, St. Louis 8, Missouri.



*From the Jobber
Displaying This Sign
Get the SETS
that deliver
FINEST GET UP
AND GO!*

Here's what you get:

- Finest Immediate SEAT-IN
- Finest Complete HIGH VACUUM OIL CONTROL
- Finest Immediate OIL CONTROL

Finest because you get all this without excessive pressures, but with longer life built right into every ring!

Get 32 pages of details in your free INSIDE FACTS BOOKLET . . . see the RAMCO Jobber with this window display today.

RAMCO

R-1198 Copyright 1956, Ramsey Corporation

PISTON RINGS

for FINEST Get UP and GO!

Thermoid Partners in Profit



There's extra profit in Spring Check-ups when you find worn fan belts and radiator hose. Be sure you *always* replace with the best!

Thermoid Redi-Curv Hose made with Neoprene Tube and Cover withstands all radiator chemicals, resists aging and cracking. Unmatched flexibility makes installation easy . . . saves time and skinned knuckles.

Thermoid Fan Belts with Neoprene covers resist high underhood temperatures, abrasive road dirt, oil and grease. *Pre-Stretching* prevents sagging and premature wear.

Get these top quality products from your Thermoid Jobber



Brake Linings and Bonded Shoes



Hydraulic Brake Parts & Fluid



Thermoid Company, Trenton, N. J.